Volume 2. Air Operator Certification and Fractional Ownership Application

CHAPTER 6. FOREIGN AIR CARRIERS OPERATING TO THE U.S. AND FOREIGN OPERATORS OF U.S.-REGISTERED AIRCRAFT ENGAGED IN COMMON CARRIAGE OUTSIDE THE U.S.

SECTION 2. 14 CFR PART 129 OPERATIONS SPECIFICATIONS

- **661. GENERAL.** In addition to obtaining economic authority from DOT, each foreign air carrier must obtain operations specifications issued by the FAA before conducting foreign air transportation operations. Appendix A of Part 129 contains detailed requirements governing applications for the issuance and amendment of operations specifications for foreign air carriers.
- A of Part 129 states that the application for foreign air carrier operations specifications should be addressed to FAA headquarters. However, the responsibility for the issuance and amendment of foreign air carrier operations specifications and the approval of Minimum Equipment Lists and maintenance programs for U.S.-registered aircraft has been delegated to certain regions and in turn to specific district offices. A foreign air carrier, however, may elect to locate its U.S. office in a region other than those specified below. Headquarters and other regional offices receiving applications from any foreign air carrier shall forward each application to the appropriate responsible Regional Flight Standards Division as follows:
 - Alaskan Region (AAL-200) for Canadian operators based in the Yukon territories, Northwest Territories, British Columbia north of 52 degrees north Latitude and Nunavut west of 100 degrees west longitude. And operators from the Russian Federation and Commonwealth of Independent states.
 - Northwest Mountain Region (ANM-200) for Canadian operators based in Alberta Saskatchewan and British Columbia south of 52 degrees north Latitude.
 - Eastern Region (AEA-200) for Canadian foreign operators based east of 100 degrees west longitude and foreign operators located in Europe, Africa, Middle East, and India, except for operators from the Russian Federation and Commonwealth of Independent states
 - Southern Region (ASO-200) for foreign operators located in the Caribbean and Central and South America

- Southwest Region (ASW-200) for all foreign operators based in Mexico
- Western-Pacific Region (AWP-200) for all foreign operators located in Asia, Pacific Basin, Australia, and New Zealand
- **665. APPLICATION.** Applications for foreign air carrier operations specifications shall be made by letter. The Letter of Application must contain the applicable information prescribed in Appendix A of Part 129. In addition to the Letter of Application, the applicant must present for review the copy of DOT 402 permit or exemption. For each leased U.S.-registered aircraft to be operated the applicant must submit the following documents:
 - A. Registration markings as required by § 129.11(a)(4)
- B. Lease agreement or a written memorandum of the terms of the lease signed by both parties
- C. Proposed Minimum Equipment List (applicant's or U.S. owner's/operator's) tailored to the applicant's operations and based on the FAA-approved master Minimum Equipment List (see chapter 8 of volume 3 for MEL)
- D. Maintenance program or procedures adequate to support the use of the proposed Minimum Equipment List
- E. Application for special purpose flight crewmember certificates, if applicable

667. PROCESSING APPLICATIONS.

A. Within 5 working days, the responsible FAA office shall notify the applicant of receipt of application, either in writing or by telephone. The application shall be evaluated to ensure that the information identified in the following has been provided and that the accuracy of each item is certified by the applicant. The evaluation of the application consists of a desk audit based on the statements and information provided by the applicant and the inspector's assessment of

the applicant's information.

(1) Routes

- Compatibility of aircraft with route and airspace requirements
- Adequacy of aircraft communications, navigation, transponder, and altitude reporting equipment
- Use of Category II or III approach/landing procedures

(2) Airports

- Adequacy of gateway, refueling, provisional and alternate airports
- Aircraft takeoff and landing weight, runway, and taxiway limitations

(3) Flight Crewmembers

- Type and class of certificate issued by State of Registry of aircraft
- Familiarity with U.S. airspace and airport operating regulations and procedures
- Fluency in English language

(4) Aircraft

- · Current and valid registration
- Markings
- Airworthiness certificate issued by State of Registry
- Continuous airworthiness maintenance program manual (U.S.-registered aircraft only)
- Minimum Equipment List (U.S.-registered aircraft only)

(5) Dispatchers

- · Proposed organization
- Familiarity with U.S. airspace and airport operating regulations and procedures
- Certificates issued by country of foreign air carrier applicant
- Weather collection, processing, and dissemination
- Accident and incident reporting procedures

B. If the evaluation results in a finding that the applicant can meet the operating requirements of Parts 91 and 129, appropriate operations specifications shall be issued to the foreign air carrier. If the evaluation results indicate deficiencies or omissions in the application, the responsible inspector must contact the representative of the foreign air carrier. The Regional Flight Standard Division shall be notified before returning or rejecting an application of a foreign national air carrier. The applicant's representative

shall be informed of the deficiencies and of what must be provided by the foreign air carrier to make the application acceptable. If the deficiencies are not satisfactorily resolved within a reasonable period of time, the application shall be returned to the applicant with a letter which describes the specific reasons why the application is deficient and unacceptable.

669. ISSUANCE OF OPERATIONS SPECIFICATIONS.

A. Operations specifications are issued to a foreign air carrier after the responsible FAA office conducts a thorough evaluation of the application and a finding is made that the applicant can meet the operating requirements of Parts 91 and 129 and ICAO Annex 6 (see § 129.11). In the case of U.S.-registered aircraft operated solely outside the United States in common carriage by a foreign person or foreign air carrier, limited operations specifications are issued to ensure compliance with maintenance requirements of §§ 129.14, 129.16, 129.20, 129.32, and 129.33. Only OpSpecs A001, A004, A447, B039, B046, D072, D082, D095, and D485 are issued to these operators. The responsible inspector shall ensure that appropriate operations specifications are completed, reviewed, approved, signed, and mailed or delivered to the foreign air carrier. See chapter 1 of volume 3 and the OPSS CHDO User's Manual for preparation of the operations specifications.

B. A foreign air carrier designator and an operations specifications number will be assigned by AFS-620 for each foreign air carrier operations specifications issued. The responsible inspector shall obtain foreign air carrier designators and operations specifications numbers directly from AFS-620 at 405-954-9723. The four letter designator shall always be the first four characters of the operations specifications number. When requesting a designator and operations specifications number the inspector shall state "the purpose of the contact is to request a foreign air carrier designator and operations specifications number" and then provide the official name of the foreign air carrier, the preferred three letter designator for the foreign air carrier. The designator of the responsible flight standards district office must also be provided (for example WP09). The fourth letter of foreign air carrier designator will always be the letter "F" (see chapter 1, section 4 for construction of foreign air carrier operations specifications number).

671. AMENDMENTS. Amendments to a foreign air carrier's operations specifications may be initiated by either the operator or the FAA. Section 129.11(b) provides that a foreign air carrier may apply for an amendment of its operations specifications and that the proposed amendment should be submitted whenever the operator proposes any change in the items required by Appendix A of Part 129 for the application or any change to other items in the foreign air carrier's operations specifications. An amendment shall be approved only after evaluation of the proposed change

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and a positive safety finding is made that the foreign air carrier can meet the operating requirements of Parts 91 and 129 in the conduct of any operation under the amended operations specifications. Amended operations specifications are processed and issued in accordance with paragraphs 283 and 285.

673. PART A OPERATIONS SPECIFICATIONS

OPSPEC A001 - ISSUANCE AND APPLICABILITY (REQUIRED FOR ALL AIR CARRIERS).

- A. Operations Specification (OpSpec) A001 must identify the OpSpecs holder. The name that appears in A001 must be the legal name of the foreign air carrier as shown on its Air Operator Certificate (AOC) issued by the State of the Operator and on its economic authority or registrant information filed with the U.S. Department of Transportation (DOT). Principal Inspectors can verify the foreign carrier's legal name on its economic authority by contacting DOT's Foreign Air Carrier Licensing Division at (202) 366-2391 or by using DOT's Docket Management System (DMS) available on the web at http://dms.dot.gov/. A foreign carrier who wishes to change its legal name on its FAA operations specifications must first register any such name change with DOT following the procedures in 14 CFR part 215 and present evidence of its new name on an AOC issued by the State of the Operator civil aviation authority (CAA). A001 also specifies:
 - the kind of operations authorized,
 - the responsibilities of the foreign carrier in conducting its operation to the U.S.,
 - the regulatory sections or international standards that apply to the operations to be conducted,
 - any other business names under which the operations are being conducted.
- B. In addition, OpSpec A001 imposes general requirements regarding the effectiveness of the air carrier's OpSpecs as they relate to their DOT economic authority, crewmember licensing and age requirements, and minimum fuel requirements for operations to the United States.
- C. Following is a summary of the information required in OpSpec A001:
- (1) The foreign air carrier's OpSpec designator/ number. This will be the same number obtained from AFS-620 (405-954-9723), which is entered in the foreign air carrier's VIS.
- (2) The DOT order number under which the foreign air carrier permit was issued, if the foreign air carrier has been issued a foreign air carrier permit. If the foreign air carrier is operating under exemption authority issued by DOT, enter the DOT docket number. If the carrier is a Canadian Charter Air Taxi Operator registered with DOT under

14 CFR part 294, enter the word "Registrant" and the number.

- (3) The DOT order or docket expiration date if applicable, or enter "N/A". Note that exemption authority will always have an expiration date.
- (4) The identifying number of the foreign air carrier's AOC as issued by the CAA of the State of the Operator. A copy of the AOC must be provided and the AOC verified with the CAA prior to issuance of part 129 OpSpecs.
- (5) The physical address of the foreign air carrier's place of business or residence within the State of the Operator.
 - NOTE: Under international law, the State of the Operator is responsible for issuing an AOC to a carrier that engages in international commercial air transport. The AOC must be issued in accordance with the standards of Annex 6 to the Convention on International Civil Aviation (the Chicago Convention). Annex 6 defines the State of the Operator as "the State in which the carrier's principal place of business is located or, if there is no such place of business, the carrier's permanent residence".
- (6) The address of the foreign air carrier within the United States. Some foreign carriers will have an operations representative in the U.S. (for example, "Representative for North American Operations"). If the carrier does not have an address within the United States, enter "None".
- (7) The foreign air carrier's mailing address for international mail delivery to its principal place of business or residence within the State of the Operator.
- (8) Doing business as (DBA) names authorized by DOT and the State of the Operator. See paragraph D below for a detailed explanation.
- D. OpSpec A001 provides for the authorization to conduct operations under other business names known as "doing business as" (DBA). If DBAs are authorized, "Other business names (DBAs)" must be listed in the foreign carrier's OpSpecs in A001, subparagraph c. If no operations are authorized to be conducted under a DBA, the statement selected for subparagraph c. will state, "The foreign air carrier shall use only the business name which appears on the operations specifications for those operations described in subparagraph b." Before listing a DBA in a foreign air carrier's OpSpecs or entering a DBA in a foreign air carrier VIS File, inspectors must verify that the DBA is on file with DOT by one of the following means:
- (1) The carrier shows that the DBA is listed on its DOT registration for Canadian Charter Air Taxi Operators

issued DOT authority under 14 CFR part 294 (registration and proof of insurance), or

- (2) The carrier shows that the DBA is listed on the foreign air carrier permit or exemption authority issued by DOT; or
- (3) Principal Inspectors can verify the foreign carrier's DBA by contacting DOT's Foreign Air Carrier Licensing Division at (202) 366-2391 or by using DOT's Docket Management System (DMS) available on the web at http://dms.dot.gov/.

OPSPEC A002 – DEFINITIONS AND ABBREVIATIONS (REQUIRED FOR ALL AIR CARRIERS). Opspec A002 includes definitions of words or phrases used in other OpSpecs paragraphs. These definitions enhance understandings between the FAA and foreign air carriers. These definitions have been developed by AFS-50 (International Programs and Policy Office) and shall not be changed by regional or district offices. Definitions will be added by AFS-50 when it becomes apparent that they are needed. Addition of a definition by an IFO makes the whole paragraph nonstandard and must be processed as a non-standard OpSpec request through AFS-50 for approval.

OPSPEC A003 – AIRCRAFT AUTHORIZATION (REQUIRED FOR ALL AIR CARRIERS)

- A. Paragraph A003 lists the aircraft that the FAA has authorized a foreign air carrier to use in its operations to the United States by make/model/series and registration/serial number. This paragraph also describes the following specific requirements in order for the aircraft to be listed in A003 and used by a foreign air carrier to conduct its international air transportation operations within the U.S.
- (1) Aircraft Registration and Airworthiness Certificates. The aircraft must have on board a current and valid certificate of airworthiness and registration issued by the State of Registry. The Chicago Convention requires in Article 29 that aircraft engaged in international navigation carry a certificate of airworthiness and registration. Airworthiness and registration certificates are also required for foreign air carrier aircraft by 14 CFR par t 91, §§ 91.203(a)(1) and (2), part 129, § 129.13, and part 375, § 375.20. If the aircraft is subject to an agreement made under Article 83 bis to the Chicago Convention, the certificate of airworthiness may be issued by the State of the Operator.
- (2) Airworthiness Code. The State of Registry must have a comprehensive and detailed national airworthiness code established for the class of aircraft as required by ICAO Annex 8, Part II, Paragraph 3.2.2. Determinations concerning the adequacy of a State's airworthiness code are made under the FAA's International Aviation Safety Assessment (IASA) program. If any doubt exists, contact the airworthiness staff at AFS-50 before adding the aircraft.

- (3) Maintenance Programs. Each aircraft must have a maintenance program approved by the State of Registry or, for an aircraft subject to an Article 83 bis agreement, by the State of the operator. For aircraft subject to an Article 83 bis agreement, verify the agreement has been registered with ICAO and covers the applicable aircraft. The maintenance program shall conform to the international standards set forth in ICAO Annex 6, Part I, Chapters 8 and 11. For each U.S.-registered aircraft, the FAA must have approved the maintenance program in accordance with part 129, section 129.14(a).
- (4) Minimum Equipment List. Accept as detailed in paragraph 5 below, each aircraft listed must have a Minimum Equipment List (MEL) that conforms to ICAO Annex 6, Part I, Paragraph 6.1.2 and that is approved by the State of the Operator in accordance with ICAO Annex 6, Part I, Paragraph 4.2.2.2. For each U.S.-registered aircraft, the FAA in accordance with § 129.14(b) must have approved the MEL (see FAA Order 8300.10, volume 2, chapter 125 for approval of MEL for operations under Part 129).
- (5) Minimum Equipment List exceptions. In some countries the CAA has not developed the Master Minimum Equipment List (MMEL) and/or approval process for development and use of an MEL by carriers operating small aircraft. Likewise, while the FAA highly encourages operators to use MELs in the United States, 14 CFR part 135 does not require MELs for aircraft operating under part 135, provided the aircraft are not operated with equipment inoperative (§ 135.179). Therefore, if the foreign air carrier does not have an MEL developed for small aircraft other than turbojets (i.e., an aircraft with a seating capacity of 30 passengers or less and/or a maximum payload of 7,500 pounds or less) that it wants to operate to the U.S., they may be authorized to operate these aircraft to the United States provided the following limitation is added to paragraph A003 as additional text:
 - "i. Ref. Aircraft MEL required in Sub-Paragraph (d) above-
 - 1. The following aircraft listed below do not have a Minimum Equipment List (MEL) approved by (insert name of foreign CAA) in accordance with the requirements of ICAO Annex 6, Part 1, Paragraph 6.1.2 or Part 3, Paragraph 4.1.2 as applicable:
 - (Insert aircraft Make/Model/Series, Specific aircraft registration or both)
 - 2. Accordingly, all systems and equipment for the above listed aircraft shall be operative when dispatched into the United States, and the aircraft shall not take off within the

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United States with installed instruments or equipment inoperative, when conducting an operation under 14 CFR part 129."

- (6) Airworthiness Directives (ADs). A foreign air carrier must have properly accomplished all airworthiness directives issued by the State of Registry or adopted by the State of Registry from the State of Design applicable to each aircraft listed, in accordance with ICAO Annex 6, Part I, Chapters 8 and 11. After the aircraft is on the OpSpecs, the failure to comply on an ongoing basis with all applicable airworthiness directives is justification for removing the aircraft from the OpSpecs.
 - NOTE: Paragraph A447 must also be issued to each carrier operating U.S. registered aircraft, which are listed in A003, to enable the FAA to notify the foreign carrier regarding emergency airworthiness directives.
- (7) Flight Deck Security. 14 CFR part 129 § 129.28 establishes additional flight deck security requirements to prevent unwanted persons from entering the flight deck when operating to the U.S.
- (8) Reduced Vertical Separation Minimum (RVSM) Operations. Both operation in U.S. airspace designated as RVSM airspace and operations in airspace designated as RVSM airspace outside the United States with U.S. registered airplanes requires authorization by the FAA in accordance with part 91, §§ 91.180 and 91.706. Additional guidance for authorizing RVSM is contained in OpSpecs B046 and D092 guidance.
- (a) The foreign air carrier or foreign operator is authorized to conduct operations in United States airspace designated as RVSM airspace in accordance with § 91.180, the limitations and provisions of OpSpec B046, and, for U.S.-registered aircraft, in accordance with the FAA-approved maintenance program requirements of OpSpec D092, provided they are listed in OpSpec A003 as being authorized for RVSM.
- (b) The foreign air carrier or foreign operator conducting operations with U.S.-registered airplanes is authorized to conduct operations in airspace designated as RVSM airspace outside the United States in accordance with § 91.706, the limitations and provisions of OpSpec B046 and the FAA-approved maintenance program requirements of OpSpec D092, provided they are listed in OpSpec A003 as being authorized for RVSM.
- (9) Minimum Navigation Performance Specifications (MNPS) Operations. MNPS Operations with U.S.-registered aircraft requires authorization by the FAA in accordance with part 91, § 91.705, this includes operations outside the United States. Foreign carriers or foreign persons holding OpSpecs issued under part 129 or part 129 section 129.14 shall be authorized MNPS operations by

operations specifications. Additional guidance for authorizing MNPS operations with U.S.-registered aircraft is contained in OpSpec B039 guidance. Operations of U.S.-registered aircraft within the airspace defined as the North Atlantic Minimum MNPS (NAT/MNPS) is authorized in accordance with 14 CFR part 91, § 91.705, the limitations and provisions of OpSpec B039 provided they are listed in OpSpec A003 as being authorized for MNPS.

- B. All aircraft information must be first entered into the OPSS system under the Certificate Holder, Aircraft Authorization Menu and then loaded into OpSpec A003 in the Select Data screen. All of the aircraft that the foreign air carrier owns, dry leases, or wet leases that they will operate within the United States must be entered in this OpSpec. Both foreign registered and U.S.-registered aircraft must be entered. Aircraft that the air carrier operates but are wet leased or operated under an interchange agreement from another carrier will need to be issued OpSpec A028, Aircraft Wet Lease Arrangements, or OpSpec A029, Aircraft Interchange Arrangements. The aircraft will only be listed in OpSpec A003 of the "primary operator's" Opspecs in the case of an interchange operation, or the "lessor's" OpSpecs in the case of a wet lease. (See Order 8400.10, Volume 2, Chapter 4, Section 4, LEASE, INTERCHANGE AND CHARTER ARRANGEMENTS). A job aid for adding an aircraft to part 129 OpSpecs is available in the OPSS system under paragraph guidance. The following provides direction for the information fields, which must be added to this OpSpec:
- (1) Make/Model/Series. When entering an authorized make/model/series into OpSpec A003, you should select it from the listing provided in the OPSS. If the appropriate make/model/series cannot be found in the OPSS, inspectors should immediately notify the OPSS Help Desk so that the table can be updated. On the Certificate Holder, Aircraft Authorization menu, enter data on both the General and Detail Tab.
- (2) Aircraft serial number. Enter the manufactures aircraft serial number
- (3) Aircraft Registration Number. Enter the aircraft registration marking assigned by the State of Registry. ICAO defines the State of Registry as "The State on whose register the aircraft is entered." In accordance with Article 18 of the Chicago Convention, an aircraft cannot be validly registered in more than one State.
- (4) *Configuration*. Select "All Cargo, Combi, Passenger, or Pax and cargo".
- (5) En route. Inspectors must enter the appropriate en route flight rule for each make/model/series. If the make/model/series is a large aircraft as defined in OpSpec A002 and/or approved for only IFR operations by the State of the Operator CAA, enter the phrase "IFR" in the column labeled "En route." If the make/model/series is other than a

large aircraft as defined in OpSpec A002 and/or restricted to VFR only operations by the State of the Operator CAA, select the phrase "VFR". If the make/model/series is other than a large aircraft as defined in OpSpec A002 and/or approved for both IFR and VFR operations by the State of the Operator CAA, select the phrase "IFR/VFR".

- (6) Condition. Also select the day/night condition for each make/model/series. If the State of the Operator CAA approves the make/model/series for both day and night conditions, select the phrase "Day/Night" in the block labeled "Condition." If the State of the Operator CAA approves the make/model/series for daylight conditions only, select the phrase "Day Only."
- (7) Noise stage Only applies to turbojet airplanes with a maximum weight of more than 75,000 lbs otherwise enter N/A. Select the aircraft noise stage II or III. If the aircraft is stage II or the aircraft is a dual noise stage certificated B-747, then OpSpec A026, Restricted Operation of Certain Stage 2 Airplanes, must also be issued to the foreign air carrier. Evidence of noise stage should be from approved aircraft documentation such as a noise certificate if issued, approved Flight Manual, or other document issued by the State of Registry.
- (8) Authorized RVSM. Enter "YES" or "NO" in this block as is applicable to the aircraft. You must enter this information at "Select Data" because it does not automatically load from the aircraft authorization database.
- (9) Authorized MNPS. Enter "YES" or "NO" in this block as applicable to the U.S. registered aircraft. Enter "NA" for foreign registered aircraft, as the FAA does not authorize MNPS for foreign registered aircraft. MNPS operations for foreign registered aircraft are authorized by the State of the Operator or State of Registry as applicable. You must enter this information at "Select Data" because it does not automatically load from the aircraft authorization database.
- C. Adding or deleting an aircraft. Inspectors should instruct a foreign air carrier who wishes to add or delete an aircraft to their part 129 OpSpecs to submit a letter to their OpSpecs holding IFO. The air carrier should address the letter to its Principle Inspectors as listed in OpSpec A039 requesting the aircraft addition or deletion. The Principal Inspectors assigned to the foreign air carrier should obtain and review the following documents prior to adding an aircraft to the air carrier's OpSpecs:
- (1) Obtain and review a copy of the State of the Operator issued operation specifications/air carrier certificate or other document, reflecting that the proposed aircraft is authorized for the proposed type of operation by the State of the Operator.
- (2) Obtain and review (if applicable) any aircraft lease (wet or dry) or interchange agreements. The lease or interchange agreements must address who is responsible for

aircraft maintenance, operational control, flight crew and cabin crew responsibility, etc. If no lease or interchange agreement is applicable, review the copies of documents showing ownership of the aircraft. (See Order 8400.10, Volume 2, Chapter 4, Section 4, LEASE, INTERCHANGE AND CHARTER ARRANGEMENTS)

- (3) Obtain and review approvals of the State of the Operator and State of Registry relating to the aircraft maintenance programs. This paragraph and ICAO Annex 6 establish the requirement that the aircraft's airworthiness certification be in accordance with a comprehensive and detailed code of airworthiness. Therefore, if the aircraft is registered in a country (which may not be the State of the Operator) that is IASA Category 2 (or has not been assessed by the FAA), coordinate with AFS-50 airworthiness staff before adding the aircraft.
- (4) Obtain and review the following aircraft-specific documentation showing approval from the State of the Operator and State of Registry and/or compliance by the foreign air carrier, as applicable:
 - The certificate of airworthiness and registration issued by the State of Registry or the State of the Operator in the case of an existing 83 bis agreement (see volume 2, chapter 4, section 4, paragraph 217).
 - If the aircraft is subject to a 83 bis agreement, review the 83 bis agreement and ensure agreement registration with ICAO.
 - Approval by the State of the Operator for the aircraft Minimum Equipment List (MEL) with exception noted above in A(5).
 - Noise Stage compliance for each applicable aircraft
 - Documentation that flightdeck door security requirements have been met in accordance with part 129, section 129.28.
 - Terminal Collision and Avoidance System, TCAS (ACAS) installation approval including compliance with required software version number for aircraft equipped with TCAS II.
 - Aircraft configuration information showing the State of Registry and/or State of the Operator- approved aircraft configurations such as "All Cargo, Combi, Passenger, or Pax and cargo".
 - The carrier has each required approval from the State of the Operator CAA for specific operations such as RVSM, CAT II/III, ILS/ PRM LAHSO, etc., to be authorized in the OpSpecs.
 - Verification of necessary U.S. Department of Transportation (DOT) approvals Verify that the carrier is authorized the number/type of

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aircraft with the addition of the new aircraft in accordance with their economic authority and the carrier has required insurance. Principal Inspectors can verify the foreign carrier's economic authority by contacting DOT's Foreign Air Carrier Licensing Division at (202) 366-2391 or by using DOT's Docket Management System (DMS) available on the web at http://dms.dot.gov/. Contact the Air Transportation Division, Program Management Branch, AFS-260, to verify that the air carriers insurance company has filed a properly completed OST form 6411, indicating that the additional aircraft have required insurance coverage. Insurance may be verified by contacting the following personnel:

- Ms. Kathy Tatum, Program Specialist (for foreign carrier names A-D), at 202-267-7897,
- George Ceffalo Program Specialist (for foreign carrier names E-N),
- Roy Robinson Program Specialist (for foreign carrier names O-Z), at 202-267-7773,
- In the case of foreign air carriers who have been issued OpSpecs managed by the Alaskan Region, insurance verification can be completed by contacting the Alaskan Region, Flight Standards Division, AAL-230, who monitors insurance on those carriers for AFS-260 (telephone 907-271-5908).
- A Statement from the foreign air carrier that the aircraft meets the aircraft equipment requirements of ICAO Annex 6 part I for airplanes or part III for helicopters as appropriate (See 14 CFR part 129, section 129.11(a).)

NOTE: A foreign air carrier whose aircraft does not meet the aircraft equipment requirements of ICAO Annex 6 must apply for and receive an exemption from the administrator in accordance with 14 CFR part 11 before the aircraft can be added to the air carrier's OpSpecs.

- (5) Obtain and review aircraft specific documentation for each U.S. registered aircraft to verify the following:
 - Approval of aircraft maintenance program and MEL by the FAA in accordance with part 129, section 129.14
 - The air carrier has complied with supplemental inspection requirements for U.S.-

- registered aircraft in accordance with part 129, section 129.16 as applicable
- Digital flight data recorder (FDR) installation is in accordance with part 129, section 129.20
- The air carrier has complied with special maintenance program requirements in accordance with part 129, section 129.32 as applicable
- The air carrier has complied with aging airplane inspections and records reviews for multiengine aircraft in accordance with part 129, section 129.33 as applicable. Enter appropriate data in OpSpec D485 regarding the airplane inspections and record reviews as appropriate.

OPSPEC A004 - SUMMARY OF SPECIAL AUTHORIZATIONS AND LIMITATIONS (REQUIRED FOR ALL AIR CARRIERS).

A. This OpSpec summarizes optional authorizations applicable to the foreign air carrier that have been issued by OpSpecs. This OpSpec also summarizes limitations and restrictions that apply to the foreign carrier's operations within the United States. Although this OpSpec is completed automatically by OPSS, principal inspectors can use this OpSpec as a checklist in selecting other optional OpSpecs for issuance in the OPSS.

B. Go to the tools menu in OPSS and then select "Edit paragraph A004". Additional optional paragraphs can then be selected by checking the blocks for the associated authorizations, limitations, or restrictions. These optional paragraphs will then be generated in the workspace.

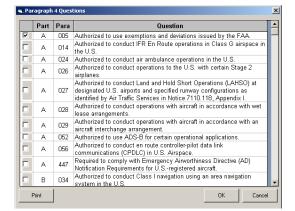


Figure 2.6.2.1. Sample Workspace.

OPSPEC A005 - EXEMPTIONS AND DEVIATIONS (OPTIONAL).

A. Both exemptions and deviations may be authorized for a foreign air carrier. In order for a foreign air carrier to conduct operations under the provisions of any exemption or deviation, OpSpec A005 must be issued and list the

exemption or deviation. Order 8400.10, volume 2, chapter 4 contains the process for application and approval of exemptions or deviations.

- B. Exemptions. Enter the current exemption number and expiration date in paragraph "a" of OpSpec A005. List the exemption numbers in numerical order. In the space labeled "Remarks and/or References" (adjacent to each exemption), enter a brief description of the exemption or, if appropriate, the exempted regulations. If another paragraph of OpSpecs specifies certain conditions or limitations related to the exemption, enter the reference number of the other paragraph in this space. Coordinate all exemptions with AFS-50 prior to authorization in the foreign carriers OpSpecs.
- C. Deviations. Enter the applicable 14 CFR sections to which a deviation has been granted in paragraph "b" of OpSpec A005. List the deviations in numerical order by 14 CFR section. In the space labeled "Remarks and/or References" (adjacent to each deviation), briefly describe the provisions of the deviation or indicate a reference number for the standard OpSpecs paragraph which authorizes the deviation. Coordinate all deviations with AFS-50 prior to authorization in the foreign carriers OpSpecs.

OPSPEC A006 - MANAGEMENT PERSONNEL. (REQUIRED FOR ALL AIR CARRIERS)

- A. A foreign air carrier's management personnel may have titles significantly different from titles of management positions used in 14 CFR parts 121 and 135. In addition, under part 129, there is no regulatory requirement for foreign air carrier management personnel, nor is it within the FAA's authority to approve foreign air carrier management personnel. The intent of OpSpec A006 is to clearly identify the air carrier's key management personnel who are fulfilling management positions in accordance with the carriers own requirements as well as any that are imposed by the State of the Operator CAA.
- B. The following provides direction for the information fields, which must be added to this paragraph.
- (1) Paragraph "a" should include the Position Title, Name, and telephone number and other contact information such as telex, fax, and email, of the responsible foreign air carrier's management individuals. At a minimum, the names of the Director of Maintenance, Director of Operations, Director of Quality Assurance, Director of Safety, and Chief Pilot (or foreign equivalent titles that fulfill similar responsibilities) should be entered in this paragraph.
- (2) Paragraph "b" should include foreign air carrier's point of contact in the United States, include the Position Title, name, and telephone number and other contact information such as telex, fax, and email. Some foreign air carriers will have a management representative in the U.S. For example, "Manager of U.S. Operations". If

the carrier does not have a management representative within the United States, enter "None" in the name block.

(3) Paragraph "c" should include the Position Title, name, and telephone number and other contact information such as telex, fax, and email of the foreign CAA official responsible for issuing the AOC and ensuring continuing oversight of the foreign air carrier.

OPSPEC A007 - OTHER DESIGNATED PERSONS. (REQUIRED FOR ALL AIR CARRIERS)

- A. Agent For Service. An agent for service is a person or company designated by the foreign air carrier upon whom all legal notices, processes and orders, decisions, and requirements of the DOT, FAA, and the National Transportation Safety Board (NTSB) shall be served. Once any of these documents has been served upon the foreign carrier's agent for service, the foreign air carrier cannot claim (legally) that it did not receive the documents. 49 USC, section 46103 (a) requires foreign air carriers to designate an agent for service. Sub-paragraph "a" should include the Name, Position Title, and telephone number and other contact information such as telex, fax, and email of the air carrier's agent for service.
- B. Persons Designated to Apply for and Receive OpSpecs. Sub-paragraph "b" should include the Name, Position, and Title of persons designated by the carrier as authorized to apply for and receive OpSpecs. Also enter the OpSpecs parts for which the designated person is responsible. Principal inspectors may determine that it is appropriate to have signatures of these designated persons recorded in this subparagraph, which may be entered as additional text.

OPSPEC A008 - OPERATIONAL CONTROL. (REQUIRED FOR ALL AIR CARRIERS)

- A. Each foreign carrier operating to the United States in accordance with part 129 must have a method of control and supervision of flight operations in accordance with ICAO Annex 6 part I, paragraph 4.2.1.3. This method of control and supervision must be contained in the manual required by ICAO Annex 6, Part I, Paragraph 4.2.2 (operational control). The State of the Operator (CAA) must have accepted or approved this manual. The intent of OpSpec A008 is to promote a mutual understanding between a foreign air carrier and the FAA concerning the system and/or procedures used by that carrier. ICAO defines "Operational Control" as "The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight."
- B. OpSpec A008 must describe or reference the system and/or procedures used by a foreign air carrier. It is preferable to complete OpSpec A008 with references to a carrier's manual or sections of a carrier's manual, which

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describe the system and/or procedures used by that carrier. It is not necessary to control these references by date. The references should be changed only when a revision to the carrier's manual makes the reference in the OpSpecs incorrect. When a carrier's manual does not adequately describe the system and/or procedures used, a narrative description combined with references may be necessary. When a narrative description is used, it should be brief but provide sufficient information so that the FAA and the carrier have the same understanding about the system and/or procedures used by the carrier.

- C. The description of the systems and/or procedures for controlling flight movement as described in the carrier's manual and referenced and/or described in the OpSpecs should include the following types of information, as appropriate to the kind of operation:
 - Methods and procedures for initiating, diverting, and terminating flights
 - Persons or duty positions authorized to, and responsible for, exercise of operational control
 - Facilities and location of facilities used by the carrier in the exercise of operational control
 - Communication systems and procedures used by the carrier
 - Special coordination methods and/or procedures used by the carrier to assure the aircraft is airworthy
 - Emergency notification procedures

OPSPEC A009 - AIRPORT AERONAUTICAL DATA. (REQUIRED FOR ALL AIR CARRIERS)

- A. Each foreign air carrier operating to the U.S. in accordance with part 129 must include airport aeronautical data in the manual required by Annex 6 part 1, 4.2.2. The data required in accordance with Annex 6 is at least the following types of airport aeronautical data:
- (1) Current aeronautical guides and charts. In formation relating to communication facilities, navigation aids, aerodromes, and other such information. (Annex 6, Part 1, 6.2.3 and Appendix 2, 7.)
- (2) Minimum flight altitudes. The method for determining minimum flight altitudes. The minimum flight altitudes for each route to be flown. (Annex 6, Part 1, 4.2.6.)
- (3) (3) Aerodrome operating minima. (Annex 6, Part I, 4.2.7 and Appendix 2, 9.)
- (a) The methods for determining aerodrome-operating minima.
- (b) Aerodrome operating minima for each of the aerodromes that are likely to be used as aerodromes of intended landing or as alternate aerodromes.

(c) The increase of aerodrome operating minima in case of degradation of approach or aerodrome facilities.

- (4) *Aerodrome information*. To enable performance calculation in accordance with Annex 6, Chapter 5, Airport Analysis.
- B. Although the regulations do not require a foreign air carrier to obtain FAA approval of the system used, OpSpec A009 provides a method of promoting the same understanding between the carrier and FAA concerning the system the air carrier uses to comply with the Annex 6 requirements pertinent to airport aeronautical data.
- C. The system that the State of the Operator approves/ accepts must be described or referenced in OpSpec A009. When possible, the OpSpec should be completed by referencing pertinent sections of the carrier's manual or other documents, which describe the system that the air carrier uses. When an air carrier's manual does not adequately describe the system and/or procedures the air carrier uses, a narrative description combined with references may be necessary. When a narrative description is used, it should be brief but provide sufficient information so that the FAA and the carrier have the same understanding about the system and/or procedures used by the carrier to obtain, maintain, and distribute required airport aeronautical data

OPSPEC A010 - AERONAUTICAL WEATHER DATA. (REQUIRED FOR ALL AIR CARRIERS)

- A. The intent of OpSpec A010 is to promote the same understanding between the foreign air carrier and the FAA concerning the system used for obtaining and disseminating required weather data. The system described or referenced in this paragraph is the system that the foreign air carrier's CAA has accepted or approved. The foreign air carrier uses the system to obtain and disseminate aeronautical weather data for the control of flight operations within the United States, in accordance with ICAO Annex 6, Part I, Paragraph 4.3.5. The manual required by ICAO Annex 6, Paragraph 4.2.2 should contain this system.
- B. OpSpec A010 must describe or reference the system that the State of the Operator approved/accepted. When possible, the paragraph should be completed by referencing pertinent sections of the carrier's manual or other documents, which describe the system used by the carrier. When a carrier's manual does not adequately describe the system and/or procedures used, a narrative description combined with references may be necessary. When a narrative description is used, it should be brief but provide sufficient information so that the FAA and the air carrier have the same understanding about the system and/or procedures used by the carrier to obtain and disseminate

aeronautical weather data.

OPSPEC A011 – A013 RESERVED FOR FUTURE USE

OPSPEC A014 - SPECIAL EN ROUTE OPERATIONS IN CLASS G U.S. AIRSPACE. (OPTIONAL)

- A. A014 provides authorization for IFR en route operations in Class G U.S. airspace. Other IFR en route authorizations may be found in OpSpecs B031, and B034 and B035 if issued.
- B. OpSpec B031, which is issued to all air carriers, prohibits IFR en route operations in Class G airspace unless the POI approves such operations by issuing A014. IFR operations in Class G airspace are not provided any air traffic control (ATC) separation services. The foreign air carrier and the PIC are responsible for avoiding obstacles and other air traffic using procedures developed by the foreign air carrier.
- C. Before authorizing en route IFR operations in Class G airspace for foreign air carriers:
- (1) The POI must confirm the foreign air carrier has a method or procedure for assuring that any facilities and services, which this type of operation depends upon, are operational during the periods in which flights are to occur.
- (2) The POI must also confirm that the carrier has developed procedures and guidance for crewmember use while operating in areas of en route operations in Class G airspace. Aeronautical Information Publications (AIP) or Flight Information Region Publications (FIR) have broadcast-in-the-blind procedures and other guidance for crewmembers to use when large areas of Class G airspace are within the area covered by the AIP or FIR.
- (3) The POI must also confirm that the carrier's CAA has approved IFR enroute operations in class G airspace for the carrier.
- D. The reference to OpSpec B051 and B056 in A014 sub-paragraph (4) is to provide for "reciprocating and turbo-propeller powered" large aircraft and small non-turbojet VFR operations in class G airspace.
- E. OpSpecs C064, C080, H113, and H121 now authorize special <u>terminal</u> area IFR operations in Class G airspace, and/or for airplanes, operations at airports without an operating control tower.

OPSPEC A015 – A022 RESERVED FOR FUTURE USE

OPSPEC A023 - PROCEDURE FOR DETERMINING OPERATIONS DURING GROUND ICING CONDITIONS (REQUIRED FOR ALL AIR CARRIERS CONDUCTING IFR OPERATIONS).

A. The intent of paragraph A023 is to promote the same understanding between the foreign air carrier and the FAA

concerning the system used for operations during ground icing conditions. The foreign air carrier uses the system described or referenced in this OpSpec to determine operations during ground icing conditions in accordance with the requirements contained in ICAO Annex 6, Part I, Paragraph 4.3.5.4. The carrier's manual, as required by ICAO Annex 6, Part I, Paragraph 4.2.2 and Appendix 2, 5.6, must contain the system. The air carrier's CAA needs to have accepted or approved the system. The Manual of Aircraft Ground De-icing/Anti-icing Operations (Doc 9640) contains ICAO guidance for operations in ground icing conditions.

- B. OpSpec A023 must describe or reference the system approved/accepted by the State of the Operator for foreign air carriers. Since Annex 6 requires the system to be in the air carrier's manual, when possible, referencing pertinent sections of the air carrier's manual or other documents that describe the system used by the air carrier should complete the OpSpec. When a single manual or document does not describe the system, it may be appropriate to provide an additional narrative description of the system to complete OpSpec A023. When a narrative description (or outline) is used, it should be brief but provide sufficient clarifying information, describing the complete system used to operate in ground icing conditions.
- C. The FAA will not require a procedure for operating in ground de-icing conditions for:
 - A foreign air carrier who is only authorized en route VFR operations within the United States using small airplanes and/or helicopters
 - A foreign air carrier that conducts VFR-only operations with small airplanes and/or helicopter for part of its operation within the United States for those aircraft.
- D. Therefore, if the foreign air carrier does not have instructions for the conduct and control of ground de-icing developed in accordance with Annex 6, Part I, Appendix 2, 5.6, for its small airplanes and/or helicopters which are operated under VFR only, the following appropriate standard statement should be entered at the "text" tab of the select data screen.
- (1) Foreign carrier for which part of their operation within the United States is conducted VFR only with small airplanes and/or helicopters:

"(insert name of foreign air carrier) has not developed instructions for the conduct and control of ground de-icing in accordance with Annex 6, Part I, Appendix 2, 5.6, for all of their small airplanes and/or helicopters. For operations with the following aircraft, (insert aircraft Make/Model/Series), which are operated VFR only within the

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United States, (insert name of foreign air carrier) shall not authorize and no (insert name of foreign air carrier) pilot may take off within the United States any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane when conducting an operation under 14 CFR Part 129. All other operations shall be conducted in accordance with the following ground icing procedures: (Enter the system used by the foreign air carrier to determine operations during ground icing conditions)"

(2) Foreign carrier for which all of their operations within the United States are conducted VFR only with small airplanes and/or helicopters:

"(insert name of foreign air carrier) has not developed instructions for the conduct and control of ground de-icing in accordance with Annex 6, Part I, Appendix 2, 5.6. (insert name of foreign air carrier) shall not authorize and no (insert name of foreign air carrier) pilot may take off within the United States any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane when conducting an operation under 14 CFR Part 129."

OPSPEC A024 - AIR AMBULANCE OPERATIONS. (OPTIONAL)

- A. The intent of OpSpec A024 is to promote the same understanding between the foreign air carrier and the FAA concerning the safe conduct of air ambulance operations within U.S. airspace.
- B. The foreign air carrier should have air ambulance procedures in their manual that has been approved/accepted by the foreign air carrier's state CAA. While ICAO Annex 6 does not contain specific references to air ambulance operations, it does require that:
- (1) The Operations Manual required by Annex 6, 4.2.2 and Appendix 2 contain:
 - instructions outlining the responsibilities of operations personnel pertaining to the conduct of flight operations
 - Checklists of emergency and safety equipment and instructions for its use.
- (2) An operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the

operation as a whole as required by ICAO Annex 6 section 4.2.3.1.

- C. The foreign air carrier should ensure that all crewmembers have been trained in air ambulance procedures in accordance with a training program approved by the foreign air carrier's state CAA. While ICAO Annex 6 does not contain specific references to air ambulance training, 9.3.1 and 12.4 require that an operator establish and maintain a ground and flight training program, approved by the State of the Operator, which ensures that all flight and cabin crewmembers are adequately trained to perform their assigned duties. In addition, 4.2.3.1 and Appendix 2 require that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole, and that instructions are contained in the operator's manual.
- D. Prior to issuing OpSpec A024, the Inspector should review the appropriate documentation to ensure that:
- (1) The air carrier has procedures in its manual for air ambulance operations that its CAA has approved/ accepted. Absent any guidance or requirements from the State of the Operator, the air carrier may use the advisory information in FAA Advisory Circular (AC) 135-15, Emergency Medical Service/Airplane (EMS/A) (for airplanes) and/or AC 135-14A, Emergency Medical Services/Helicopter (EMS/H) (for helicopters). The foreign air carrier's air ambulance procedures should be consistent with those of a U.S. air carrier authorized to conduct similar air ambulance flights.
- (2) The carrier has air ambulance operations included in their approved crewmember-training program. The minimum training should indicate that the Pilot in Command (PIC) (and the Second in Command (SIC) if appropriate) is trained in the same areas as required of all pilots **and** supplemented by training in any additional aircraft equipment, normal operating procedures and emergency procedures specific to air ambulance operations. The inspector should also determine whether medical personnel participating in the flight are considered passengers or crewmembers in order to determine the extent of training required.
- (3) The carrier is authorized by an appropriate government agency within the State of the Operator (CAA or other agency). This may be in the form of a letter, operating certificate, or other document. The inclusion of air ambulance procedures and training in required manuals may be sufficient to determine if the operator is authorized to conduct air ambulance operations since those procedures and training will have been approved/accepted by the State of the Operator.
- (4) The installation of the medical equipment (or air ambulance required equipment) on the aircraft (the aircraft

modification) has been approved by the State of Registry and the State of the Operator.

E. The system approved/accepted by the State of the Operator for the foreign air carrier must be described or referenced in OpSpec A024. Referencing pertinent sections of the air carrier's manual or other documents that describe the system used by the air carrier should complete the paragraph. When a single manual or document does not adequately describe a system, it may be appropriate to provide an additional narrative description of the system in additional text to complete OpSpec A024. When a narrative description (or outline) is used, it should be brief but provide sufficient clarifying information, describing the complete system for air ambulance operations.

OPSPEC A025 - RESERVED FOR FUTURE USE

OPSPEC A026 - RESTRICTED OPERATION OF CERTAIN STAGE 2 AIRPLANES. (OPTIONAL)

- A. The intent of OpSpec A026 is to promote the same understanding between the foreign air carrier and the FAA concerning aircraft noise requirements and ensure that a foreign air carrier who operates Stage 2 aircraft to the United States is in compliance with the Airport Noise and Capacity Act (ANCA) of 1990. ANCA prohibits the operation of civil subsonic turbojet Stage 2 airplanes over 75,000 pounds in the contiguous United States after December 31, 1999. On November 29, 1999, the President signed into law certain changes to ANCA that affect operators of Stage 2 airplanes. These changes distinguish airplanes by type of certification and operation. The prohibition on revenue operations of Stage 2 airplanes after December 31, 1999, remains in effect.
- B. The noise requirements were implemented in 14 CFR parts 36 and 91, sections 91.801 through 91.877. In accordance with 14 CFR part 91, no foreign air carrier shall operate any aircraft to or from any airport in the contiguous United States, unless it complies with Stage 3 noise levels. Sub-paragraph "a" of OpSpec A026 reiterates this requirement. There are two exceptions to this requirement as follows:
- (1) Dual-Certificated Boeing 747 Airplanes. At the foreign air carrier's discretion, in order to comply with the noise requirements of 14 CFR Section 91.853, an operator of a Boeing 747 that is currently certificated for operation in either a Stage 2 or Stage 3 configuration (per the aircraft flight manual) may choose to limit the operation of that airplane to Stage 3 configuration only, to allow operation in the contiguous United States. These airplanes should be entered in sub-paragraph "b" of OpSpec A006, including Make/Model/Series, registration number, and serial number.
- (2) Other Stage 2 Airplanes. The foreign carrier may choose to restrict their operation to operations solely outside the 48 contiguous United States. 14 CFR section

- 91.857 requires that this restriction be included in the carrier's operations specifications. These airplanes should be entered in sub-paragraph "c" of OpSpec A006, including Make/Model/Series, registration number and serial number.
- *C. Additional information.* The law permits a range of nonrevenue Stage 2 operations. Any operator of a Stage 2 airplane over 75,000 pounds may operate in the contiguous United States for the following purposes:
 - (1) To sell, lease, or scrap the airplane.
- (2) To obtain modifications to meet Stage 3 requirements. Operators moving a Stage 2 airplane to a location for Stage 3 modification must provide a copy of the modification contract to the FAA with the application for a special flight authorization.
- (3) To obtain scheduled heavy maintenance or significant modifications. The FAA interprets "scheduled heavy maintenance" to mean a "C" or "D" check; "significant modifications" are those requiring special knowledge or equipment not readily available elsewhere or not practicable outside the United States.
- (4) To deliver the airplane to a lessee or return it to a lessor.
 - (5) To park or store the airplane.
 - (6) To prepare the airplane for any of these events.
- D. Special Flight Authorizations. The operator of a Stage 2 airplane that wishes to operate in the contiguous United States for any of the purposes listed above may apply to the FAA's Office of Environment and Energy (AEE) for a special authorization. The applications are due 30 days in advance of the planned flight and must provide the information necessary for the FAA to determine that the planned flight is within the limits prescribed in the law.

OPSPEC A027 - LAND AND HOLD SHORT OPERATIONS. (OPTIONAL)

- A. General. This paragraph authorizes Land and Hold Short Operations (LAHSO) for foreign air carriers operating under part 129, after requirements for operational policies, procedures, and training for Land and Hold Short Operations (LAHSO) have been met. No air carrier may participate in LAHSO unless it has accomplished flight crew training. The information contained in this sub-paragraph is critical to the safety of LAHSO and will be used in conjunction with HBAT 00-14A and FAA Air Traffic Order 7110.118, Land and Hold Short Operations (LAHSO).
- B. Background. In 1997, the Federal Aviation Administration (FAA) expanded and replaced Simultaneous Operations on Intersecting Runways (SOIR) with LAHSO. SOIR, used since 1968, exclusively described simultaneous operations on two intersecting runways; either two aircraft landing simultaneously or one aircraft landing while another

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is taking off. LAHSO includes landing operations to hold short of an intersecting runway, taxiway, predetermined point, or an approach/departure flight path. LAHSO, just as SOIR, is an air traffic control (ATC) tool used to increase airport capacity and maintain system efficiency and safety. In April 1999, the FAA, in coordination with industry, outlined changes in policy and procedures for conducting LAHSO. LAHSO procedures require both pilot and controller participation to balance the need for system efficiency and safety. These operations include landing and holding short of an intersecting runway, an intersecting taxiway, or some other predetermined point on the runway other than on a runway or taxiway.

- C. Foreign air carriers may not participate in LAHSO and the FAA will not issue OpSpec A027 unless the following conditions are met:
- (1) The appropriate CAA having oversight responsibility for the foreign air carrier has authorized the air carrier to conduct LAHSO.
- (2) The appropriate CAA certifies as to the completion of training and qualification of the flight crewmembers to conduct LAHSO. The training and qualification of flight crewmembers must be equivalent to that specified in HBAT 00-14A, Land and Hold Short Operations (LAHSO); Operations Specifications A027.
- (3) The appropriate CAA has certified the landing and stopping capabilities and airworthiness requirements of the airplanes that will conduct LAHSO. The airworthiness requirements and the landing and stopping capabilities of any airplane being operated in LAHSO by a foreign air carrier must be equivalent to that specified in HBAT 00-14A
- (4) The part 129 carriers must be identified in the local Air Traffic Directives before they can participate in LAHSO.
- (5) The Principal Operations Inspector has received the necessary written documentation from the appropriate CAA certifying the successful accomplishment and completion of LAHSO policies, procedures, and operational requirements specified in HBAT 00-14A.
- (6) Foreign air carriers in order to participate in LAHSO, must ensure that English speaking flightcrews are at the controls of the aircraft when the LAHSO clearance is accepted.
- D. OpSpec A027, sub-paragraph c, must reference/describe the foreign air carrier's LAHSO procedures approved/accepted by the State of the Operator. These procedures may be contained in any flight crewmember manual or document readily available to flight crewmembers for reference. When possible, the OpSpec should be completed by referencing pertinent sections of the carrier's manual or other documents, which describe the procedures used by the carrier. When an air carrier's manual

does not adequately describe the procedures used, a narrative description combined with references may be necessary. When a narrative description is used, it should be brief but provide sufficient information so that the FAA and the carrier have the same understanding about the LAHSO procedures used by the carrier.

OPSPEC A028 - AIRCRAFT WET LEASE ARRANGEMENTS. (OPTIONAL)

- A. The intent of OpSpec A028 is to promote the same understanding between two or more foreign air carriers and the FAA concerning their aircraft wet lease arrangements. This paragraph provides general direction and guidance for processing and authorizing wet lease arrangements in operations specifications. Order 8400.10, volume 2, chapter 4, section 4, contains complete information on wet lease agreements for foreign air carriers and should be reviewed prior to issuing A028. When a wet lease arrangement is authorized, the FAA shall issue OpSpec A028 to both the lessor (primary operator) and the lessee. If the foreign air carrier has more than one lease agreement, all such agreements must be authorized by OpSpec A028. The aircraft shall also be entered in OpSpec A003 of the lessor (primary operator). A determination must be made as to which carrier has operational control. In the case of a U.S. carrier being the lessor, the U.S. carrier must have operational control. A U.S. carrier may not wet lease from a foreign carrier, see Order 8400.10, volume 2, chapter 4, section 4.
- B. For the purposes of these operations specifications, Wet Lease is defined as any leasing or other agreement, other than a code-sharing arrangement, in which a lessor such as a foreign air carrier leases an aircraft and at least one flight crewmember to another foreign air carrier (the lessee) where the lessor retains operational control. A wet lease requires that authorized officers of the two parties execute a written agreement between the lessor and the lessee. A copy of the lease agreement must be provided to the CHDO.
- C. Before issuing OpSpec A028, Principal Inspectors will need to review the terms and conditions of the appropriate wet lease agreement. The lease agreement shall specify the primary operator's approved maintenance program, MEL, that the primary operator has operational control and any associated procedures to be used during the wet lease operation.
- D. The following provides direction for the information fields, which must be added to this OpSpec:
- (1) Paragraph a. Lessor. The name of the lessor and lessee for each agreement must be entered in the columns provided. The aircraft registration and serial number used in each agreement, DOT authorization date and number and the execution and expiration date of each agreement, must be entered in the columns provided. If it is

necessary to specify other conditions or limitations, additional text should be added to OpSpec A028.

(2) Paragraph b. Lessee. The name of the lessor and lessee of each agreement must be entered in the columns provided. The aircraft registration and serial number used in each agreement, DOT authorization date and number and the execution and expiration date of each agreement, must be entered in the columns provided. If it is necessary to specify other conditions or limitations, additional text should be added to OpSpec A028. Any additional text added to the OpSpec makes the whole OpSpec nonstandard. Any additional text added to this OpSpec must be coordinated with AFS-50.

OPSPEC A029 - AIRCRAFT INTERCHANGE. (OPTIONAL)

- A. The intent of OpSpec A029 is to promote the same understanding between two or more air carriers and the FAA concerning their aircraft interchange arrangements. This paragraph provides General direction and guidance for processing and authorizing aircraft interchange arrangements in operations specifications. Complete information on aircraft interchange agreements for foreign air carriers is contained in Order 8400.10, volume 2, chapter 4, section 4.
- B. An interchange agreement (a subset of a dry lease) is another method of providing operational flexibility and greater utilization of large transport category aircraft. Interchange agreements permit a foreign air carrier or foreign person to dry lease and take or relinquish operational control of an aircraft at an airport located either in the U.S. or in the state of the foreign air carrier or foreign person. Operational control of the aircraft is transferred at an airport specified in the agreement and as authorized in the OpSpecs. The OpSpecs of both carriers must be amended to reflect any interchange agreement. When a aircraft interchange is authorized, OpSpec A029 shall be issued to both the carrier who (as determined by FAA) is the primary operator and the interchange operator. For the purpose of this paragraph, the primary operator is the foreign air carrier that would normally operate the aircraft if an interchange agreement were not in effect. The interchange operator is the other party to an interchange agreement. The aircraft to be used in the interchange agreement shall be identified in OpSpec A003 of the primary operator's operations specifications.
- C. Before issuing OpSpec A029, Principal Inspectors must review the terms and conditions of the appropriate interchange agreement. The interchange agreement shall specify the primary operator's approved maintenance program and the MEL and associated procedures to be used during the interchange operation. The agreement should

ensure the following:

- (1) Operational Control. The primary operator, when its flightcrew is operating the aircraft, shall be responsible for and maintain operational control of the aircraft. When the aircraft is under the operational control of the primary operator, the flightcrews and dispatch personnel of the primary operator shall conduct the operation. The Interchange operator, when its flightcrews are operating the aircraft, shall be responsible for and maintain operational control of the aircraft. When the aircraft is under the operational control of the interchange operator, the flightcrews and dispatch personnel of the interchange operator shall conduct the operation.
- (2) Aircraft Maintenance. The primary operator shall be responsible for the maintenance control of the aircraft at all times.
- D. The following provides direction for the information fields, which must be added to OpSpec A029 in the columns provided:
- (1) Parties to Interchange Agreement the name of the Primary and Interchange operator.
 - (2) Aircraft Make, Model, and Series.
 - (3) Manufacturers aircraft serial number
- (4) Aircraft registration markings from the State of Registry
- (5) The interchange points (Airport name and ICAO identifier) where operational control between carriers will change.

OPSPEC A030 – A035 – RESERVED FOR FUTURE USE

OPSPEC A036 – TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS). (REQUIRED FOR ALL AIR CARRIERS CONDUCTING OPERATIONS WITH AIRCRAFT REFERENCED IN PART 129, SECTION 129.18)

- A. General. Part 129, section 129.18 requires TCAS installation and use by certain foreign air carriers when operating in U.S. airspace. Section 129.18 does not require foreign air carriers a to install and use TCAS for any aircraft or operations taking place outside of the U.S. 12 nm territorial limit (14 CFR part 71, § 71.9), even though a U.S. ATC facility might provide separation services (for example, in oceanic airspace). Various states may abide by ICAO guidance found in ACAS Standards and Recommended Practices (SARPS).
- B. Provisions for use of TCAS II in U.S. airspace. The following provisions are from appendix 3 of AC 120-55B, Air Carrier Operational Approval and Use of TCAS II, and apply to a foreign air carrier operating aircraft with a

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maximum passenger seating configuration of more than 30 seats in the United States, in accordance with section 129.18(a).

- (1) An air carrier must have installed and operate an appropriate Mode S transponder on a suitable code specified by ATC during flight in U.S. airspace. In addition, a valid unique aircraft-specific Mode S address must be assigned to the airplane, and the Mode S transponder must be set to this address. Valid addresses are those consistent with the ICAO Mode S address allocation plan contained in appendix C, part I, ICAO Annex 10, and plan of the State of Registry for the specific aircraft. The unique address, when properly set, may not be altered, set to a duplicated address, or set to an address that potentially interferes with ATC or TCAS safety functions (for example, must not be set to all "ones" or all "zeros," or the country address must not be set without the unique aircraft specific address). This guidance is appropriate for non-U.S. registered or U.S.-registered aircraft operated by a foreign air carrier in U.S. airspace.
- (2) A TCAS II System capable of coordinating with TCAS units meeting TSO-C119A or TSO-C119B must be installed. Except as provided for by MEL provisions, acceptable to the State of the Operator, an air carrier must operate the TCAS system in an appropriate TCAS mode during flight in U.S. airspace.
- (a) For U.S.-registered aircraft, the operator must obtain and use an FAA-approved MEL containing the authority to dispatch the aircraft with a TCAS system or component temporarily inoperative; or
- (b) For foreign-registered aircraft, the operator must obtain and use an MEL, approved by the State of the operator, containing the authority to dispatch the aircraft with a TCAS system or component temporarily inoperative.
- (3) The air carrier must use training and procedures for use of TCAS as specified by ICAO, AC 120-55B, or other equivalent criteria acceptable to the FAA and the State of the Operator when operating in U.S. airspace.
- (4) The air carrier must report to its POI unsafe conditions or performance related to TCAS operation which potentially could affect continued safe operations in the U.S. NAS within 10 business days of the time that such a hazard is identified.
- C. 10-30 Seat Turbine Powered Airplanes. A foreign air carrier operating turbine powered aircraft with a passenger seat configuration of 10 to 30 seats, excluding any pilot seat, to the United States, must be equipped with an approved Traffic Alert and Collision Avoidance System in accordance with section 129.18(b).

(1) If TCAS II is installed the foreign carrier must comply with all of the provisions of subparagraph B above.

- (2) Except as provided for by MEL provisions acceptable to the State of the Operator, the TCAS system must be operable during flight in U.S. airspace.
- (a) For U.S.-registered aircraft, the operator must obtain and use an FAA-approved MEL containing the authority to dispatch the aircraft with a TCAS system or component temporarily inoperative; or
- (b) For foreign-registered aircraft, the operator must obtain and use an MEL, approved by the State of the Operator, containing the authority to dispatch the aircraft with a TCAS system or component temporarily inoperative.
- (3) Flight crewmembers must be properly trained and qualified in the procedures for the operational use of TCAS as contained in the foreign air carrier's operations manual. These procedures must be used when aircraft operations are conducted in U.S. airspace.
- (4) Air carriers must report to its POI unsafe conditions or performance related to TCAS operation which potentially could affect continued safe operations in the U.S. NAS within 10 days of the time that such a hazard is identified.
- D. Before authorizing OpSpec A036 for a foreign air carrier:
- (1) The POI must confirm that the appropriate TCAS equipment has been properly installed in accordance with State of the Operator/Registry requirements.
- (2) The POI must also confirm that the air carrier has developed procedures and guidance for crewmember use while operating in U.S. airspace with the use of TCAS (ACAS) equipment.
- (3) The POI should verify via documentation that the carrier is using the required software version on their TCAS II equipment. The software version number needs to be entered in sub-paragraph a. (2) of Opspec A036.

NOTE: Examples of other acceptable national documentation concerning TCAS (ACAS) operational procedures.

- Eurocontrol Training brochure --ACAS H Operations in the European RVSM Environment, 3 August 2001
- JAR-OPS Temporary Guidance Leaflet No. 11
 Guidance for Operators on Training Programmes for the use of Airborne Collision Avoidance Systems (ACAS), 1 June 1998
- United Kingdom Aeronautical Information Circular (AIC) 54/1999 --Airborne Collision Avoidance System (ACAS) -- Legal Aspects and interface with Air Traffic Control -- Colli-

sion Avoidance Systems (ACAS), 1 March 1994

- E. Approval of TCAS for FAA Type Certification (TC) or Supplemental Type Certification (STC). This information is comprehensively addressed in AC 20-131, Airworthiness and Operational Approval of Traffic Alert and Collision Avoidance Systems (TCAS II) and Mode S Transponders, as amended. This AC provides information for U.S. air carriers, aircraft and TCAS manufacturers, various inspectors, foreign air carriers operating in U.S. airspace, and other aviation organizations regarding standard means acceptable to the FAA to establish and ensure continued compliance with 14 CFR as related to TCAS.
- F. Software version. The international standard for TCAS II, referred to as Airborne Collision Avoidance System (ACAS), includes the latest software version (v 7.0), as detailed by ICAO.

OPSPEC A039 - SUMMARY OF REQUIRED REPORTS. (REQUIRED-ALL CARRIERS)

- A. The intent of OpSpec A039 is to provide for standard foreign carrier reporting on information required by the International Field Office (IFO) assigned responsibility for the management of the foreign carrier's OpSpecs and surveillance in the United States. The air carrier must report the following information to the IFO on an ongoing basis in accordance with OpSpec A039, sub-paragraph "a":
- (1) Foreign carrier (company) ownership information and any changes thereto.
- (2) Address and telephone numbers at the principal operations and maintenance locations for the carrier both in the State of the Operator and in the United States.
- (3) Foreign air carrier management personnel as listed in OpSpecs A006 and A007.
- (4) Flight schedules for scheduled operations to the United States, when requested by the IFO.
- (5) Prior notification of any charter flights, to any point in the United States. This notification is required for any nonscheduled flights to the United States, unless those flights are conducted to airports **listed as a regular airport** in either OpSpec C070, Airports Authorized for Scheduled Airplane Operations, or OpSpec H120, Airports Authorized for Scheduled Rotorcraft Operations, if issued. The purpose of this notification is to enable the planning and retargeting of surveillance on non-scheduled 129 operations (Ondemand/ Charter).
- (a) The method of notification, such as fax or email, shall be mutually agreed to by the IFO and the foreign carrier and a brief description entered in sub-paragraph a (5) of OpSpec A039.

(b) The FAA requires some foreign air carriers to obtain ATC route authorization from FAA headquarters, ATP-203 under the U.S. Special Interest Flight (SIF) Program, in compliance with FAA Order 7110.65 Section 9.2, and other U.S. aviation and security regulations. These carriers shall not be required to make an additional notification in regards to the report required by OpSpec A039, sub-paragraph a (5). Under SIF, the air carrier is required to obtain advance authorization of ATC routings to, from, or through U.S. airspace for both charter and scheduled flights. These notifications are sent via telegraphic message to each FAA region concerned and are available on the SIF website at http://www.apo.data.faa.gov/sif.html. A list of countries to which SIF applies and information on access to the web site can be obtained from ATP-203 at 202-267-8115. IFO inspectors can use these notifications to aid them in the surveillance of these carriers. For these carriers, N/A should be entered in paragraph a (5), and the following standard statement should be entered in additional text of OpSpec A039:

ATC route authorization shall be obtained from FAA Headquarters, ATP-203 (202)-267-8115 prior to any operation in the national Airspace System of the United States in accordance with FAA Order 7110.65.

- (6) Names and contact information regarding operations and maintenance liaison persons and contractors at any U.S. airport the air carrier will serve on a scheduled basis as listed in OpSpec C070 or OpSpec H120.
- (7) Wet lease and interchange operations conducted by the foreign air carrier to, from, or within the U.S. on behalf of other carriers.
- (8) A copy of any economic authority issued by the U.S. Department of Transportation.
- B. The following information fields must be added to sub-paragraph "b" of OpSpec A039 regarding Principal Inspector contact information:
- (1) The names of the IFO-assigned FAA Principal Operations, Maintenance, and Avionics Inspectors.
- (2) Associated Principal Inspector phone and facsimile numbers.
- (3) Associated Principal Inspector e-mail and mailing addresses.

OPSPEC A040 - AIRCRAFT RADIO EQUIPMENT. (REQUIRED FOR ALL AIR CARRIERS)

A. The FAA issues OpSpec A040 to all foreign air carriers. The intent of OpSpec A040 is to promote a mutual understanding between a foreign air carrier and the FAA concerning the installed radio equipment necessary for operation in U.S. airspace. Additionally, OpSpec A040

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establishes an equivalent level of safety as it relates to radio communication and navigation equipment, between U.S. air carrier/operator requirements under 14 CFR Parts 121 and 135 and foreign air carriers operating under part 129 in the U.S. Paragraph A040 also reiterates the requirements contained in section 129.17 and ICAO Annex 6, Chapter 7.

B. OpSpec A040 requires no additional input from Principal Inspectors.

OPSPEC A041 A446 (RESERVED FOR FUTURE USE)

OPSPEC A056 - CONTROLLER-PILOT DATA LINK COMMUNICATIONS (CPDLC). (OPTIONAL)

A. The purpose of OpSpec A056 is to ensure that the aircraft equipment a foreign carrier uses for CPDLC operation in the U.S. National Airspace System (NAS), U.S. 12 nm territorial limit (14 CFR § 71.9), and its operational procedures and training are compatible, ensuring safety in the NAS. The following requirements are from AC 120-70, Initial Air Carrier Operational Approval For Use Of Digital Communication Systems, Appendix 3, 129 provisions for use of data link in U.S. airspace.

NOTE: At the present time CPDLC in domestic operations is limited to the Miami Air Route Traffic Control Center's domestic airspace on a test basis. Before any issuance of this paragraph, principal inspectors must coordinate with AFS-50.

- (1) An appropriate data link must be installed and operated on suitable frequencies specified by ATC during flight in U.S. airspace if procedures are predicated on its use. A unique and specific address, the ICAO 24-bit aircraft identification, must be assigned to the airplane and the data link must recognize this address. When properly set, the unique address may not be altered, set to a duplicated address, or set to an address that potentially interferes with ATC or data link safety functions.
- (2) A data link capable of coordinating with air traffic facilities using RTCA DO-219 (current version) or other equivalent standards must be installed. The data link system must be operated in an appropriate data link mode during flight in U.S. airspace using data link, except as provided for by MEL provisions acceptable to the State of the operator.

NOTE: FANS 1/A CPDLC is non ATN-compliant and only authorized for use in the oceanic en route environment. Therefore, foreign carrier CPDLC operations planned for domestic U.S. airspace require the use of VDL-2 ATN compliant digital radios. (FANS-1/A is non-ATN compliant whereas VDL-2 and future VDL-3 are ATN-compliant).

(3) An air carrier must use training and procedures for use of data link as specified by ICAO, this Order, or

other equivalent criteria acceptable to the FAA when operating in U.S. airspace.

- (4) An air carrier must report to its POI unsafe performance or conditions related to data link operations which potentially could affect continued safe operations in the U.S. NAS (a data link event) within 10 days of the time that such a hazard is identified
- B. Before authorizing the foreign carrier CPDLC operations in the United States by issuing OpSpec A056:
- (1) The Principal Inspectors must confirm that the appropriate CPDLC equipment has been properly installed in accordance with State of the Operator/Registry requirements and meets the requirements of AC 120-70, Initial Air Carrier Operational Approval For Use of Digital Communication Systems, or ICAO equivalent.
- (2) The Principal Inspectors must also confirm that the carrier has developed procedures and guidance and provided training approved by the State of the Operator for crewmembers while operating in U.S. airspace with the use of CPDLC equipment.
- C. The following provides information for the information fields which must be added to this OpSpec:
 - (1) The aircraft Make, model, and Series.
- (2) The Make and Model of data link system installed.
- (3) Any additional remarks deemed necessary by the Principal Inspectors reference the CPDLC system.

OPSPEC A447 – (FORMERLY A047) TELEGRAPHIC/ EMERGENCY AIRWORTHINESS DIRECTIVES (AD) NOTIFICATION REQUIREMENTS FOR U.S.-REGISTERED AIRCRAFT. (REQUIRED FOR ALL CARRIERS OPERATING U.S. REGISTERED AIRCRAFT)

- A. The FAA shall issue OpSpec A447 to any foreign air carrier/Operator that operates U.S. registered aircraft. Paragraph A447 establishes the Emergency Airworthiness Directives (AD) notification and receipt requirements for foreign carriers and operators, and requires the carrier/operator to maintain an up-to-date information system that provides the FAA a means of notifying the carrier/operator of Telegraphic/Emergency ADs. The carrier/operators of a U.S.-registered aircraft is responsible for maintaining that aircraft in an airworthy condition, as required by part 91, § 91.403(a) and 14 CFR part 39. This information system must include:
- (1) An AD point of contact name, address, telephone, and notification method (facsimile number) for AD

notification. An Emergency AD that requires immediate action may be issued telegraphically or electronically.

NOTE: Aircraft Certification (AIR) uses facsimile and/or US Mail for official notification of the Emergency ADs. AIR no longer use SITA or ARINC codes for electronic notification. AIR does not use E-mail for official Emergency AD notification at this time):

- (2) Electronic means are used to distribute Emergency ADs affecting transport category aircraft.
- (3) The "receipt" of an Emergency AD notification, current notification information, and compliance with an AD is the responsibility of the carrier's/operator's management personnel.
- B. The foreign air carrier/operator is required to notify the FAA by signing the fax cover page and faxing it to the Delegation and Airworthiness Programs Branch (AIR-140, telephone (405) 954-7071) at facsimile number (405) 954-4104 or they may fax their confirmation receipt to the Directorate issuing the Emergency AD. Use the Directorate Fax number and include all the information required in subparagraph d(4) of A447.
- C. ADs are substantive regulations issued by the FAA in accordance with part 39. ADs are issued under the following circumstances:
- (1) When an unsafe condition has been found to exist in particular aircraft, engine, propellers, or appliances installed on aircraft, and
- (2) When that condition is likely to exist or develop in other aircraft, engines, propellers, or appliances of the same type design.
- D. Once an AD is issued, no person may operate a product to which the AD applies except in accordance with the requirements of that AD.

675. PART B OPERATIONS SPECIFICATIONS PARAGRAPHS - EN ROUTE AUTHORIZATIONS AND LIMITATIONS

OPSPEC B001 – B030. RESERVED FOR FUTURE USE.

OPSPEC B031 - VFR AND IFR EN ROUTE LIMITATIONS AND PROVISIONS (REQUIRED FOR ALL CARRIERS).

A. OpSpec B031 is issued to all foreign air carriers both fixed wing and/or rotorcraft. Only the lead-in paragraph and sub-paragraph "a" is issued to those foreign air carriers operating small airplanes and helicopters, who operate under Visual Flight Rules (VFR) only. In the OPSS you will be prompted in the "text tab" to highlight the statement "Load this value only for VFR operation" after which you

will need to click on the "Load Data" button. OpSpec B031 then restricts the foreign carrier to enroute operations using VFR Class I navigation only. When OpSpec B031 is issued to a small VFR only operator, OpSpec B056 must also be issued, which provides additional VFR operating restrictions.

- B. Principal inspectors issue the lead-in paragraph and sub-paragraphs a through f as prescribed below to all other foreign air carriers that conduct Instrument Flight Rules (IFR) operations, or IFR and VFR operations. You will be prompted in the "text tab" of the OPSS to highlight the statement "Load this value only for IFR or VFR and IFR operations" after which you will need to click on the "Load Data" button. The delimiting phrases, "if issued", "permitted in accordance with", or "if that paragraph is also issued" are used in the subparagraphs that refer to other OpSpecs that give the specific authorizations (e.g., IFR in Class G Airspace, VFR Class I Navigation, Operations at non-tower airports). Operations inspectors, coordinating with airworthiness inspectors, complete these authorizations. OpSpec B031 imposes the following additional restrictions and limitations:
- (1) VFR operations are authorized only if principal inspectors issue OpSpec B051 for large airplanes and/or OpSpec B056 for small airplanes and helicopters. Both of the referenced paragraphs impose additional VFR restrictions. Sub-paragraph "a" also restricts the foreign air carrier's VFR operations to Class I navigation only.
- (2) The foreign air carrier's IFR operations are restricted to Class I navigation in U.S. airspace.
- (3) The carrier is prohibited from conducting enroute IFR operations in Class G airspace unless additional requirements are met in accordance with OpSpec A014. OpSpec A014 must be issued to authorize IFR enroute operations in Class G airspace.
- (4) Unless additional requirements are met in accordance with C064, C080 for airplanes, and H113 and H121 for helicopters, the air carrier is prohibited from conducting IFR terminal operations, including flights to alternate or diversionary airports, in Class G airspace and, for airplanes, restricted to operate only to airports with an operating control tower.
- (5) The foreign air carrier must "navigate to the degree of accuracy required by air traffic control". When a flight remains at all times within the three-dimensional block of airspace assigned by ATC, that aircraft is considered to be navigated to the degree of accuracy required for the control of air traffic. If an aircraft deviates outside its assigned block of airspace (except during a declared emergency), that aircraft has not been navigated to the degree of accuracy required for control of air traffic. ATC separation minimums represent the minimum dimensions of a three-dimensional block of airspace, which ATC assigns to control

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flight. In the United States, 14 CFR and air traffic control directives establish separation minimums. Separation minimums that apply to operations in the U.S. National Airspace System (NAS) are found in FAA Order 7110.65, Air Traffic Control. Additional information on the concept of accuracy required by air traffic control is found in Order 8400.10, volume 4, chapter 1, section 1.

- (6) Restricts the conduct of a foreign air carrier's IFR enroute operations to those routings that lie within the operational service volume of the navigation facilities defining the airways route, except for operations over routes designated with a Minimum En Route IFR Altitude (MEA) GAP. If the carrier is operating outside the operational service volume of the navigation facilities they are conducting Class II navigation, which is not allowed by 129 operations specification. Additional information on the concept of service volume is found in Order 8400.10, volume 4, chapter 1, section 1, paragraph 5E.
- (7) Prohibits off-airway navigation unless the foreign air carrier has an approved method of "off airway navigation" to depart from established airways. When an air carrier's aircraft looses this capability, the air craft must return to the established airway. With the exceptions listed below, airways navigation facilities shall be the primary navigation reference for these off-airway routings and the off-airway routings shall lie within the operational service volume of the facilities used. The appropriate ATC facility must authorize such off-airway operation and the air carrier must conduct the operation in accordance with the route width and MEA criteria that the State of the Operator prescribed for or applied to the foreign air carrier. The required airborne and ground-based navigation facilities must be available and able to provide navigational performance to meet the degree of accuracy required for air traffic control over the route of flight specified in the ATC clearance. There are four exceptions:
- (a) Unless operating in Class G airspace, which requires additional authorization through other OpSpecs, the foreign air carrier may operate IFR flights over routing predicated on ATC radar vectoring services.
- (b) Deviations from routings specified in this OpSpec are authorized when necessary due to in-flight emergencies or to avoid potentially hazardous meteorological conditions.
- (c) Navigation may be conducted using an area navigation system, which is certificated, for use in IFR flight for the conduct of Class I navigation over the routes being flown, including outside positive radar control, provided navigation is in accordance with OpSpec B034 and the FAA has issued OpSpec B034. Any one or all of the aircraft to be operated by the foreign carrier as listed in OpSpec A003 and or OpSpecs A028 and A029 must be authorized IFR Class I navigation using area navigation systems certified to meet the requirements of AC 90-45, Approval of Area Navigation

Systems for Use in the U.S. National Airspace System. OpSpec B034 must also be issued to all air carriers conducting Class I navigation in the United States who wishes to proceed "direct" to a point or destination in or out of controlled airspace.

- (d) For operations within Class A Airspace, the foreign air carrier is authorized to conduct Class I navigation under positive radar control with the area navigation or longrange navigation systems specified in OpSpec B035, if issued. Any one or all of the aircraft to be operated by the foreign carrier as listed in OpSpec A003 and or OpSpecs A028 and A029 must be capable of conducting operations in excess of FL180 and the airplane(s) must have long-range navigation systems installed OR the airplane(s) must have area navigation systems installed.
- (8) Subparagraph "f" allows the use of Global Positioning System (GPS) for Class I IFR Navigation, if the existing aircraft avionics installation includes Area Navigation (RNAV) capability. To authorize this paragraph, it must be selected in the OPSS. You will be prompted in the "text tab" to highlight the statement "Load this value only if authorized to use GPS for Class I navigation" and you must click on the "Load Data" button. This paragraph reads, "The certificate holder is authorized to use GPS navigation equipment which has been properly installed in the aircraft in accordance with approval from the foreign carriers civil aviation authority, and for which the operation of such equipment has been approved by their civil aviation authority, as a supplement to ICAO standard navigation equipment while conducting Class I navigation."

OPSPEC B032 – B033 RESERVED FOR FUTURE USE.

OPSPEC B034 - IFR CLASS I EN ROUTE NAVIGATION USING AREA NAVIGATION SYSTEMS. (Optional)

- A. OpSpec B034 authorizes a foreign air carrier to conduct navigation using an installed area navigation system, which has been approved by the State of Registry and State of the Operator. The area navigation system must meet the en route performance criteria prescribed by the most recent version of AC 90-45, Approval of Area Navigation Systems for Use In the U.S. National Airspace System (See volume 4). The aircraft (make/model) and the manufacturer and model of the area navigation systems authorized for this type of navigation must be listed in paragraph "a". When the capability exists to revert to conventional dual airborne VOR, VOR/DME, and/or NDB navigation systems, only a single area navigation system needs to be specified. If this capability is not available, dual or redundant (separate and independent) area navigation systems must be specified.
- B. Paragraph "b(3)" permits the use of a fix obtained from a redundant area navigation system to substitute for a

required ground-based NAVAID fix when that NAVAID is temporarily out of service.

- C. The POI shall coordinate with the Principal Avionics Inspector (PAI) to obtain the proper nomenclature of the manufacturer and mode, to ensure the area navigation system is installed in accordance with approved data and meets the criteria of the most recent version of AC 90-45. Additionally, the POI shall request the foreign air carrier to provide documentation that substantiates:
- (1) That the foreign air carrier's approved training program includes flightcrew training on the area navigation system(s) to be used, or
- (2) That the foreign carrier requires flightcrews to satisfactorily complete a flight check using the system.
- D. OpSpec B050shall reference OpSpec B034 for the areas of en route operations where area navigation is authorized by OpSpec B034.

OPSPEC B035 - CLASS I NAVIGATION IN THE U.S. CLASS A AIRSPACE USING AREA OR LONG RANGE NAVIGATION SYSTEMS (OPTIONAL). OpSpec B035 authorizes an operator to conduct Class I navigation within the U.S. positive control area (PCA) using an area navigation system (including a long-range navigation system), which does not meet the en route performance criteria of the most recent version of AC 90-45, Approval of Area Navigation Systems for Use In the U.S. National Airspace System. (See Order 8400.10, volume 4.) The area or long-range navigation system must be installed in accordance with approved data and be operational except in accordance with an approved MEL. Any system authorized for en route operations in the United States under OpSpec B034 may be authorized for en route operations under OpSpec B035. The airplanes (make/model) and the manufacturer and model of the area or long range navigation systems authorized for this type of navigation must be listed in paragraph "a". Only a single navigational system needs to be specified.

OPSPEC B036 – B049 RESERVED FOR FUTURE USE.

OPSPEC B039 – OPERATIONS IN NORTH ATLANTIC MINIMUM NAVIGATION PERFORMANCE SPECIFICATIONS (NAT/MNPS) AIRSPACE WITH U.S. REGISTERED AIRCRAFT. (OPTIONAL). OpSpec B039 lists the airplane types that a foreign air carrier (or operator) operating U.S. registered aircraft are authorized to use in NAT/MNPS airspace. Airplanes shall be listed by make/model/series, navigation equipment (manufacturer/model), and any restriction/limitation. In addition each airplane must also be authorized in paragraph A003 of the primary operator (see 8400.10, Volume 2, Section 4) for MNPS operations by registration number.

A. General – NAT/MNPS airspace is any defined as the volume of airspace within the Oceanic Control Areas of Santa Maria, Shanwick, Reykjavik, Gander Oceanic, and New York, excluding the area west of 60(degrees) W and south of 38(degrees) 30(minutes)N as defined in 14 CFR Part 91 Appendix C and ICAO NAT Regional Supplementary Procedures (SUPPS) (Doc 7030).

NOTE: RVSM has been implemented in NAT/MNPS (North Atlantic MNPS Airspace) from Flight Level 290 through 410, and airplanes must also be authorized to conduct RVSM operations in accordance with 14 CFR part 91.706. See 8400.10, Volume 2, Chapter 4, section 2, paragraph 289, OpSpec B046.

- B. OpSpec B039 authorizes Class II navigation in the airspace designated as North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace. When issuing this paragraph, the POI and PAI must make certain that the air carrier has appropriately installed the required long-range navigation and communication equipment on the aircraft (with the appropriate approvals). The inspectors must also verify that the Aircraft Flight Manual (or supplement) stipulate that the navigation equipment is specifically approved for operations in NAT/MNPS airspace. Additionally, the POI should verify that the operator's pilot training program approved by the State of the Operator incorporates training on MNPS operations. The PAI should verify (and require) that the foreign carrier or operator incorporates into its FAA approved maintenance program instructions for continuous airworthiness for the long-range navigation and communication equipment. Validation tests of the operator's ability to operate in NAT/ MNPS airspace should have been conducted by the State of the Operator. Additionally, the air carrier must meet the requirements for NAT/MNPS airspace operations in FAA Order 8400.10, Volume 4, Section 205 and Advisory Circular 91-70.
- C. The airplane (make/model/series) and the long range navigation systems (manufacturer/model) authorized for operations in NAT/MNPS airspace must be listed in OpSpec B039 paragraph d. This list must indicate dual or redundant (separate and independent) long range navigation systems. Each airplane must also be authorized in paragraph A003 for MNPS operations by registration number.
- D. OpSpec B039 paragraph e provides for flight operations in NAT/MNPS airspace over special contingency routings with a single, long-range navigation system. (See volume 4.) Usually, all airplanes and navigational system combinations listed in OpSpec B039 paragraph d should also be listed in OpSpec B039 paragraph e, but in a manner that indicates a single long-range navigation system authorization. This authorization permits revenue operations while positioning the airplane for repair of a malfunctioning navigational system. Additionally, other aircraft and

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navigational equipment combinations, which the air carrier may need to ferry over these routes in nonrevenue operations, should be listed. This is necessary because section 91.706 requires NAT/MNPS authorization

regardless of revenue considerations. The following are examples of how airplanes and navigational systems authorized for flight over special contingency routings should be listed.

Figure 2.6.2.2. Sa	npe Navigation	Equipment Table.

AIRPLANE TYPE	NAVIGATION EQUIPMENT
MAKE//MODEL	MANUFACTURER//MODEL
Boeing 747-400	Single Litton LTN-72R
Airbus 310-300	Single Sperry FMS with dual IRU
Boeing 737-800	Single Canadian Marconi CMA-734
	or a single Litton LTN-90

OPSPEC B046 - OPERATIONS IN REDUCED VERTICAL SEPARATION MINIMUM (RVSM) AIRSPACE OF THE UNITED STATES AND OPERATIONS IN RVSM AIRSPACE BY U.S. **REGISTERED AIRCRAFT.** OpSpec B046 describes the specific requirements for airplanes used by a foreign air carrier or operator in part 129 RVSM operations. The FAA issues OpSpec B046 if any of the airplanes that a foreign air carrier or operator uses is authorized domestic RVSM operations in the United States, or the foreign carrier or operator uses U.S. registered airplanes that are authorized RVSM operations anywhere RVSM is applied outside the United States. Airplanes authorized RVSM will be listed by make/ model/series and serial/registration number in OpSpec A003 of the primary operator (see 8400.10, volume 2, section 4), indicating that RVSM operations are authorized for that aircraft and referencing OpSpec B046 (See paragraph 288, OpSpec A003, B (9)).

A. The following are specific requirements for the airplanes used by a foreign air carrier or operator in part 129

RVSM operations:

- (1) General. RVSM airspace is any defined portions of airspace where, based on Regional Air Navigation Agreement, airplanes are separated by 1,000 feet (300 meters) vertically above flight level (FL) 290. In the United States, this will include (FL) 290 to FL 410, inclusive. Generally, aircraft and foreign air carriers/operators that have not been authorized by the State of Registry and the State of the Operator to conduct RVSM operations cannot operate at flight levels where RVSM is applied. Exceptions to this requirement are published by individual Air Traffic Service Providers. Air Traffic Service Providers have elected to implement RVSM as a means to provide more fuel/time-efficient altitudes and routes to operators, and to enhance en route airspace capacity.
- (2) RVSM Areas of Operation. The following table shows some examples of major areas where RVSM has been, or is planned to be implemented

Figure 2.6.2.3. Areas of RVSM Operation..

Area of Operations	Implementation Dates	Flight Levels
North Atlantic MNPS Airspace	March 1997	FL 330-370
	October 1998	FL 310-390
	January 2002	FL 290-410
Pacific Oceanic Airspace	February 2000	FL 290-390
Australia	November 2001	FL 290-410
West Atlantic Route System	January 2002	FL 290-410
All European Airspace	January 2002	FL 290-410
Western Pacific/South China Sea	February 2002	As published in ATS
		Documents
Northern Canada	April 2002	FL 290-410
Middle East and Asia South of the	November 2003	As published in ATS
Himalayas		Documents
Domestic United States, Southern	Planned for	FL 290-410
Canadian Domestic Airspace, Caribbean	January 20, 2005	
and South America		

B. RVSM Guidance-General. ICAO Guidance material relating to airplane equipment necessary for flight in RVSM airspace is contained in the Manual on Implementation of a 300 m (1 000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive (**Doc 9574**). Using the guidance provided in FAA Guidance **91-RVSM** (as amended) "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied", inspectors will ensure that foreign air carriers or operators and aircraft meet the standards of Title 14 of the Code of Federal Regulations (14 CFR) part 91, appendix G, Operations in RVSM Airspace, and the guidance contained in ICAO Doc 9574.

C. Guidance and Sources of Information.

- (1) Federal Aviation Administration (FAA) RVSM Homepage. The RVSM homepage provides information on RVSM programs in various areas of the world. It provides a link to the Domestic RVSM Web page where information is posted on plans and programs to implement RVSM in the domestic United States. It also links to the RVSM Documentation page that provides specific information on aircraft and operator approval for RVSM operations. The web address for the RVSM homepage is: www.faa.gov/ats/ato/rvsm1.htm.
- (2) RVSM Documentation Web page. The RVSM Documentation Web page provides access to regulations, guidance, documents and contacts. This Web page is maintained by the Flight Technologies and Procedures Division, AFS-400. Click on "RVSM Documentation" at the following web address: www.faa.gov/ats/ato/rvsm1.htm,
- (3) In the Operations Specifications Subsystem (OPSS) in association with OpSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace of the United States and Operations in RVSM airspace by U.S. registered aircraft.
- (4) Applicable regulations. 14 CFR part 91, Section 91.706 applies to RVSM operations outside the United States by U.S. registered aircraft. Part 91, Section 91.180 applies to RVSM operations within the U.S. by any civil aircraft. Both sections require that the foreign air carrier or operator and their aircraft comply with the standards of part 91, appendix G, and that the operator obtain FAA authorization to conduct those RVSM operations. The RVSM Documentation Web page provides a link to section 91.706, 91.180 and appendix G.
- (5) Applicable ICAO Standards. ICAO Annex 6, section 7.2.3 contains the standard for flights in defined portions of airspace where, based on Regional Air Navigation Agreement, a vertical separation minimum (VSM) of 300 m (1 000 ft) is applied above FL 290. This standard requires that flight in RVSM airspace be authorized by the State of the Operator. ICAO Annex 6, section 8.3.1 requires that the operator provide, for the use and guidance of main-

tenance and operational personnel concerned, a maintenance program, approved by the State of Registry, containing the information required by ICAO Annex 6, section 11.3. This would include the additional maintenance program requirements for RVSM.

(6) FAA Guidance.

- (a) FAA 91-RVSM, as amended, can be found on the RVSM Documentation Web page. 91-RVSM provides an acceptable means to authorize the foreign air carrier or operator's airplanes to conduct flight in U.S. airspace designated as RVSM airspace, and also to authorize the foreign air carrier or operator's U.S. registered airplanes to operate in airspace designated as RVSM airspace outside the U.S. It provides detailed guidance for aircraft manufacturers, other engineering organizations, and foreign air carriers and operators to follow when developing programs intended to meet the standards of part 91, appendix G.
- (b) If a foreign air carrier or operator conducting operations under part 129 requests to deviate from the practices and procedures provided in 91-RVSM, the inspector should forward a request for assistance through their assigned FAA International Field Office (IFO) to AFS-400. AFS-400 will respond after coordination with AFS-50 and AFS-300.
 - NOTE: 91-RVSM was developed in national and international forums and is used by civil aviation authorities throughout the world. International Civil Aviation Organization (ICAO) Document 9574, Edition 2, Manual on Implementation of a 1,000 ft Vertical Separation Minimum Between FL 290 and FL 410 Inclusive, cites 91-RVSM as an acceptable means for RVSM approval and was based on this document.
- (7) Relationship between RVSM Authorization and Horizontal Navigation Authorizations. In designated oceanic airspaces, foreign air carriers or operators are required to obtain both RVSM authorization and certain horizontal navigation authorizations from the State of the Operator's CAA. These are separate, specific authorization actions. For example, to operate in North Atlantic Minimum Navigation Performance Specification (NAT/MNPS) airspace, foreign air carriers or operators are required to obtain both RVSM and NAT/MNPS authority. Foreign air carriers and operators of U.S.-registered aircraft must also receive authorization from the FAA in accordance with 14 CFR part 91, section 91.705 by being issued OpSpec B039.
- (8) Traffic Alert and Collision Avoidance System (TCAS). Information on TCAS as it relates to RVSM operations can be found on the RVSM Documentation Web page. Part 91 appendix G does NOT require that aircraft be equipped with TCAS for RVSM operations. Appendix G, section 2 does require, however, that if an aircraft is equipped with TCAS II and is used in RVSM operations,

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then it must be a TCAS II that meets Technical Standard Order (TSO) C-119b (Version 7.0) or a later version. TCAS equipage requirements can be found in 14 CFR Section 129.18

- (9) Determining Aircraft RVSM Compliance. The phrases, "determining aircraft RVSM compliance," and "initial RVSM airworthiness approval," both appear in RVSM documents to indicate that the FAA has determined that the foreign air carrier or operator's aircraft comply with appendix G, RVSM standards.
- (10) Inspector Handbook Guidance. The Order 8300.10, Airworthiness Inspector's Handbook, volume 2, and 91-RVSM, paragraph 11d, provide guidance on inspector determination that aircraft are RVSM compliant. 91-RVSM Paragraph 11d(1) and (2) discuss the documents that the foreign air carrier or operator must submit to the FAA to show that in-service aircraft or aircraft manufactured RVSM-compliant are in compliance with the RVSM requirements of part 91, appendix G.
- (a) For most in-service aircraft, the RVSM airworthiness documents take the form of SBs, Service Letters or STCs. These documents contain requirements that are specific to individual aircraft types or groups and generally require inspections and/or hardware or software modifications. The foreign air carrier or operator must submit documents to the FAA to show that the required actions have been completed for each airframe that will operate in RVSM airspace.
- (b) For aircraft manufactured RVSM-compliant, the AFM or TCDS must contain statements that show the aircraft to be eligible for RVSM operations.
- D. Authorization Process. Principal Inspectors will authorize RVSM operations by designating the aircraft "Authorized RVSM" in OpSpec A003 of the primary operator (see 8400.10, Volume 2, Section 4), issuing OpSpec B046 and, for U.S. registered aircraft, OpSpec D092. For guidance on completing OpSpec D092 see Paragraph 291, OpSpec D092 in this section. Authorize specific areas of RVSM operation by adding OpSpec B046 to the "Reference Paragraphs" section of OpSpec B050, Authorized Areas of En Route Operation, Limitations and Provisions. The POI, PAI, and PMI must coordinate the issuance of OpSpecs B046 and OpSpec D092 for U.S. registered aircraft.
- (1) Before designating the airplanes in A003 and paragraph B046 is issued, IFO inspectors must obtain documentation from the foreign air carrier or operator for verification of RVSM approval to include the following:
- (a) In the case of foreign registered airplanes, a copy of their foreign OpSpecs or other issued air operator certificate (AOC) special operating provisions which shows they have been authorized by the State of the Operator for RVSM. The documentation from the foreign civil aviation authority (CAA) must show the Make/Model/Series,

Aircraft serial number and Aircraft Registration Number of the airplanes that the operator has been authorized to fly in RVSM airspace. Normally for foreign registered aircraft, IFO inspectors will only need to examine the foreign OpSpecs or other AOC special operating provisions documented evidence of foreign CAA approval. If the IFO believes it to be necessary in the interest of safety to verify such RVSM authorization, however, IFO inspectors may require that the operator submit the following:

- i. Documentation of airplane RVSM eligibility. The foreign air carrier or operator's aircraft must comply with RVSM standards. For in-service aircraft Documentation showing that inspections and/or aircraft system modifications are completed as required by the applicable Service Bulletin (SB), Service Letter, Supplemental Type Certificate (STC) or other approved documents approved or accepted by the State of Registry CAA. For aircraft that were manufactured RVSM compliant, approved Airplane Flight Manual (AFM) or Type Certificate Data Sheet (TCDS) contain a statement of RVSM eligibility as appropriate. For U.S.-registered airplanes, the FAA is the State of Registry CAA and documentation shall be in accordance with subparagraph (b) below.
- ii. Documentation showing that the State of the Operator CAA has approved the foreign air carrier or operator's RVSM maintenance program, and that it is acceptable to the State of Registry.
- iii. Documentation that the State of the Operator CAA has approved/accepted the operator's plan to participate in a monitoring program.
- iv. Documentation that the State of the Operator CAA has approved/accepted the foreign air carrier or operator's RVSM operational procedures in their manual required by Annex 6, 4.2.2.1.
- (b) In the case of U.S. registered airplanes, Documentation of airplane RVSM eligibility. For in-service aircraft the FAA determines that inspections and/or aircraft system modifications are completed as required by the applicable FAA Service Bulletin (SB), Service Letter, Supplemental Type Certificate (STC) or other Aircraft Certification Office approved document. For aircraft manufactured RVSM compliant, the FAA approved Airplane Flight Manual (AFM) or Type Certificate Data Sheet (TCDS) contain a statement of RVSM eligibility as appropriate.
- (c) In the case of U.S. registered airplanes, that the FAA has approved the foreign air carrier or operator's RVSM maintenance program by issuing OpSpec D092.
- E. Domestic U.S. RVSM Operational Policy/ Procedures. Until the FAA publishes operational policy and procedures for RVSM in the domestic United States, foreign air carriers or operators can use 91-RVSM, appendix 4 as the basis for their RVSM operations training and operating practices/procedures. The FAA will publish Opera-

tional procedures such as those for en route failure of RVSM systems in domestic U.S. airspace in the Aeronautical Information Manual and, in addition, AFS-400 will publish and distribute a Sample Pilot Bulletin that can be incorporated into individual operator programs. Foreign air carriers or operators will be responsible for incorporating this material into their programs prior to conducting RVSM operations in the United States. The FAA anticipates that operational procedures unique to domestic U.S. airspace will not be extensive.

F. Monitoring Programs.

- (1) Objective of Monitoring. The primary goal of monitoring is to provide a quality control check on the altitude-keeping performance of the wide variety of operators and aircraft. It has been determined that this may be accomplished by sampling a number of airframes of each aircraft type that an operator will operate in RVSM airspace. Altitude-keeping performance data is analyzed to determine that the aircraft fleet, as well as individual foreign air carrier or operator, exhibits performance that is consistent with RVSM standards.
- (2) Operator Plan and Monitoring Requirements. 91-RVSM paragraph 11d(8) calls for each foreign air carrier or operator, when applying for RVSM authority, to submit a plan to participate in monitoring programs. It further notes that the current monitoring requirements for individual operators in specific RVSM areas of operation are published on the FAA RVSM Documentation Web site.

NOTE: Operators are no longer required to complete monitoring prior to being granted operational approval.

(3) Monitoring Procedures. Monitoring procedures for ground-based and Global Positioning System (GPS)-based monitoring systems are published on the RVSM Documentation Web page. foreign air carrier or operator aircraft of a specific type or group are monitored after they have been determined to be RVSM compliant. Currently, the foreign air carrier or operator can have its aircraft monitored by either the ground-based Height Monitoring Unit (HMU) or a portable GPS-based Monitoring Unit (GMU) that can be placed on the aircraft. Foreign air carrier or operators may have the option of over flying the FAA ground-based

monitoring system called the Aircraft Geometric Height Measurement Element (AGHME).

- G. PTRS entries U.S. Registered Aircraft only.
- (1) RVSM Approvals Database. IT IS IMPERATIVE THAT THE PTRS BE UPDATED IN A TIMELY MANNER. The FAA Separation Standards Group (ACB-310) is retrieving PTRS information and compiling it into a database of RVSM aircraft and operator approvals. It is also forwarding the information to the international bodies tasked with tracking RVSM aircraft/operator approval.
 - NOTE: This information is being used to find and investigate aircraft that fly at RVSM FLs but are not RVSM-approved. The database of RVSM approvals is not, however, used in real time to grant or deny clearance into RVSM airspace.
- (2) Make separate PTRS entries, as follows for U.S. registered aircraft:
- (a) In-service U.S. Registered Aircraft. See 91-RVSM, paragraph 11d(1). When the foreign air carrier or operator provides documentation that RVSM work is completed on individual airframes in accordance with appropriate airworthiness documents (e.g., SBs, STCs), the PTRS must be updated.
- (b) U.S. Registered Aircraft Manufactured RVSM-compliant. A PTRS entry is also required for "Initial Airworthiness Approval" of aircraft that are RVSM compliant on delivery. Since no specific work is required to be accomplished on such aircraft, the same date that is listed for the operations activity code when the POI issues the OpSpecs may also be used for the airworthiness and avionics activity code.
- (c) *OpSpecs Issuance*. When an inspector issues OpSpecs authority for each specific aircraft, the PTRS must be updated.
- (d) *Other Actions*. When "Other" actions, as described in paragraph (3) below, are taken, the PTRS must be updated.
- (3) The IFO will update the system, at a minimum, with the specific items listed below.

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:Figure 2.6.2.4. PTRS Codes.

	INITIAL AIRWORTHINESS	OPSPECS	OTHER*
	APPROVAL	GRANTED	
	(U.S. Registered Aircraft)		
Operations Activity Code	None	1411	1413
Airworthiness Activity Code	3411	None	3413
Avionics Activity Code	5411	None	5413

NOTE: For in-service aircraft, approval means required SB, STC, or Aircraft Service Change work was accomplished. For aircraft manufactured RVSM-compliant, AFM or other appropriate documents found to show RVSM compliance.

* "Other" may include actions such as: Nnumber change; withdrawing RVSM approval due to transfer of airframe to a different operator; investigation of oceanic navigation error report, etc.

- (4) Specific PTRS Entries are as follows:
 - (a) Section I—Transmittal.

CFR: 129

STATUS: Closed

RESULTS: Completed or Assisted

CLOSED DATE: Date of Initial Airworthiness Approval or date OpSpecs were issued.

DESIGNATOR: 4-letter code

TRACKING: Used for all operators, the date RVSM authorization was withdrawn

MISCELLANEOUS: Manufacturer's aircraft serial number

(b) Section IV—Comments.

PART 129 OPERATORS	PRIMARY AREA	KEY WORD	OPINION CODE
Initial Airworthiness Approval	A or F	643	I
Full RVSM Approval (OpSpecs	A or F	643	I
Issued)			
Other	A or F	699	I

- (c) Additional Section IV Comments.
- i. For all foreign air carriers or operators: Amplifying remarks why RVSM approval was withdrawn.
- ii. For all foreign air carriers or operators: If available, Aircraft Mode-S Address Code.

OPSPEC B050 - AUTHORIZED AREAS OF EN ROUTE OPERATION, LIMITATIONS, AND PROVISIONS (required for all air carriers).

A. OpSpec B050 must specify only those areas of en route operation (or individual routes which have specific limitations or procedures associated with the route) for which the foreign air carrier is authorized to conduct operations under part 129. OpSpec B050 must include all areas of en route operation where the foreign air carrier conducts scheduled operations as well as nonscheduled operations. OpSpec B050 prohibits operations in areas not listed. Therefore, it is important to consider those areas where the foreign air carrier may conduct nonscheduled operations. Standard phraseology describing areas of en route operation for various areas of the world are programmed into the OPSS. This standard phraseology should be used whenever possible. However, for unique situations the POI or operator may develop and enter more appropriate descriptions of the areas of en route operation or

individual routes along with any special limitations or procedures.

- $B.\ To\ prepare\ OpSpec\ B050$ for issuance, the POI must accomplish the following:
- (1) First, obtain the "list of areas of en route operation." The OPSS guidance subsystem contains detailed information on geographical areas. The areas authorized for issuance to a foreign air carrier in OPSS are:

USA - The 48 contiguous United States and the District of Columbia

USA - The State of Alaska

USA - The State of Alaska; the following islands [insert]

USA - The State of Hawaii

USA - The State of Hawaii; the following islands [insert]

USA - The States of [insert]

USA - The Territory of [insert]

- (2) The next step is to select the individual areas of en route operation to be authorized.
- (a) Certain selections have blank spaces, which when selected must be completed. These selections should normally be used only when the operation is to be limited to certain states, or islands within a larger area of en route operation. For example, a foreign air carrier may have its operation limited to Hawaii and other specific island(s) and territories(s) within the region of the South Pacific ocean, such as Guam, Samoa. These types of selections provide two or three blank spaces; however, as many states or islands as appropriate can be entered.
- (b) Other selections include or exclude certain types of airspace or area, which have specific operational requirements. The POI must determine whether the operator meets the specific operational requirements before authorizing a selection, which includes these types of airspace or areas.
- (c) If the standard phraseology for a particular selection is not appropriate, the POI may develop an appropriate description of the area to be authorized. In these cases, the POI can delete the standard phraseology and insert the nonstandard description of the area of en route operation. POIs should consult any documents in the OPSS guidance subsystem for guidance in the preparation of appropriate descriptions when air carriers seek approval to operate in affected areas.
- (d) In today's airspace environment and aviation technology it is not practical or desirable to list each route a foreign air carrier may need to use. Instead, authorized geographic or airspace areas of en route operation shall be listed in the OpSpecs. However, at times it may be necessary to list individual routes in B050 due to special limitations or procedures associated with the routes. The routes should be described by beginning and ending points, such as NAVAIDs (or radial/bearings and distances from NAVAIDs) or geographic coordinates. The route description should also describe the routing between the beginning and ending points with words such as "direct," "via 270 degree radial," or other appropriate descriptions. Descriptions of special limitations or procedures for each route must be developed for entry in the "Limitations, Provisions, and Reference Paragraphs" column of OpSpec B050. Examples of limitations or procedures include MEAs, MAAs, or limitations, which specify the type of navigation, required such as pilotage or station-referenced. After descriptions of the individual routes and associated limitations, or procedures are developed, they must be entered into B050 at an appropriate location. These routes, limitations, or procedures should be entered directly below the area of en route operation selection within which the individual route is located. If the route transverses more than one area of en route operation, enter the route description directly below the area of en route operation selection in which the major portion of the route is located.

- (3) After selecting the areas of en route operation to be authorized and appropriately editing those selections, the "Limitations, Provisions, and Reference Paragraphs" column of OpSpec B050 must be properly edited. The POI must assure that the appropriate limitations, provisions, and/ or reference paragraphs are specified for each area of en route operation selected.
- (a) The OPSS will automatically print OpSpec B031 as a reference paragraph for each area of en route operation selected regardless of the type of operation, VFR, VFR and IFR or IFR.
- (b) Other applicable reference paragraphs must be manually added to a specific area of en route operation. These other reference paragraphs either specify a requirement such as long range navigation equipment, or grant a specific authorization, such as use of area navigation equipment for Class I navigation. The POI must determine which reference paragraphs are pertinent to each area of en route operation and enter them in the "Limitations, Provisions, and Reference Paragraphs" column.
- (c) The POI should arrange the reference paragraphs in numerical order and insert appropriate punctuation and conjunctions.
- (4) After the reference paragraphs are either deleted or added, any special requirement pertinent to an area of en route operation or to a particular aircraft operating within the area must be prepared and added to OpSpec B050. The recommended method for accomplishing this is the use of notes. Notes should be consecutively and uniquely numbered. The word "Note" and its unique number should be entered in the "Limitation, Provisions, and Reference Paragraphs" column adjacent to each area of en route operation to which the note applies. The word "Note" and its unique number is then repeated in the special requirements blocks provided on the areas of en route operation list. After each note and unique number in the special requirements block, the applicable limitation, provision, or procedure must be described. Alternatively, limitations, procedures, or clarifying language can be inserted directly into the "Limitations, Provisions, and Reference Paragraphs" column adjacent to the applicable area of en route operation.
- (5) It is essential that the POI thoroughly coordinates OpSpec B050 with the foreign air carrier. This coordination should begin with the preparation of the "list of the areas of en route operation". The POI should work directly with the carrier when preparing the list. This is especially important when many areas of U.S. operations are involved. After the "list of areas of en route operation" have been completed and entered into the computer, a draft of OpSpec B050 can be printed. The POI must review the draft for comprehensibility and accuracy. The draft should also be coordinated with the foreign air carrier. Any items on the draft that cause a conflict of understanding must be resolved. There must be a clear understanding between the

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FAA and foreign air carrier on the authorizations, limitations, and provisions of OpSpec B050. All technical, editorial, and format changes must be entered into OPSS for final printing, signing, and issuance.

OPSPEC B051 - EN ROUTE VISUAL FLIGHT RULES (VFR) LIMITATIONS AND PROVISIONS – LARGE AIRPLANES. (Optional)

- A. OpSpec B051 is issued to foreign air carriers who are authorized to conduct en route VFR operations using reciprocating or turbo propeller-powered large airplanes. Foreign air carriers who are also authorized to conduct VFR enroute operations with small airplanes and helicopters must also be issued OpSpec B056. The purpose of OpSpec B051 is to provide a higher level of safety in international air service or international air transportation operations by imposing certain restrictions and limitation above those that would normally be imposed by part 91 alone. These restriction and limits are in accordance with those imposed on similarly situated U.S. operators operating under part 121. This OpSpec imposes the following additional limitations and restrictions on foreign air carriers:
- (1) Limits VFR enroute operations to VFR station-referenced Class I navigation. (For guidance on VFR station-referenced Class I navigation. See Order 8400.10, volume 4, chapter 1, section 3.
- (2) Requires that VFR Fuel requirements meet those of Annex 6 instead of part 91.
- (3) Imposes minimum VFR flight altitudes, which are greater than those required by part 91.
- (4) Imposes minimum visibilities which may exceed those of part 91.
- (5) Requires that the flight crew have completed training on VFR station-referenced Class I navigation in accordance with their approved training program.
- B. Before issuing OpSpec B051 to a foreign air carrier, the POI will ensure the following:
- (1) The foreign air carrier has a VFR station-referenced Class I navigation training program for flight crewmembers approved by the State of the Operator.
- (2) The foreign air carrier has the necessary radio navigation equipment installed to conduct VFR station-referenced Class I navigation in accordance with Volume 4, Chapter 1, Section 3.
- C. Although the OPSS allows the Inspector to select several options for the type of VFR navigation for OpSpec B051 in "Select Data", only "VFR Station Referenced" shall be selected. OpSpec B051 must also be listed for each area in OpSpec B050 where VFR en route operations are

authorized.

- D. The standard cruising altitudes prescribed in OpSpec B051, sub-paragraph b(4), may not always support VFR altitudes on certain routes. An example of this may be when there are recommended lower altitudes (other than listed in OpSpec B051) on standard routes for part 91 operations as published in local airport or state directories. The POI may prescribe other minimums for any route or part of a route where the safe conduct of the flight requires other altitudes. If the foreign air carrier is able to show that it is just as safe to fly at lower altitudes after considering the character of the terrain, the quality and quantity of meteorological services, the navigational facilities available, and other flight conditions, they may apply for a nonstandard OpSpec B051 prescribing VFR routes and procedures for specific operations. The procedures to apply for such a nonstandard OpSpec are described below:
- (1) The foreign air carrier shall submit all nonstandard OpSpecs requests to the POI.
- (2) The request must contain enough supporting information, such as:
 - A statement of why the foreign air carrier cannot comply with the specific subparagraph
 - The airports and routes specific to the operation
 - The comparable level of safety
 - · Pertinent navigational equipment
 - The type of aircraft
 - Company procedures that ensure the safety of flight
 - Any other supporting documentation
- (3) Further, the request must include a copy of OpSpec B051 with the proposed nonstandard language inserted appropriately at the end of the OpSpec.

CAUTION:Do not change or add anything to the language, format, or numbering of the standard OpSpec. All nonstandard language must be added after the standard paragraph in additional text. The nonstandard OpSpec B051 shall only be issued to the foreign air carrier after concurrence by AFS-50.

OPSPEC B052 – B055 RESERVED FOR FUTURE USE.

OPSPEC B056 - VISUAL FLIGHT RULES (VFR) LIMITATIONS AND PROVISIONS - SMALL AIRPLANES AND HELICOPTERS. (OPTIONAL)

A. The FAA issues OpSpec B056 to foreign air carriers who are authorized en route VFR operations using small

airplanes and/or helicopters and conduct:

- (1) Scheduled operations with airplanes other than turbojet powered airplanes having a maximum passenger-seat configuration of 9 seats or less, excluding each crew-member seat, and a maximum payload capacity of 7,500 pounds or less.
- (2) On-demand operations with airplanes other than turbojet powered airplanes having a passenger-seat configuration of 30 seats or fewer, excluding each crewmember seat, and a payload capacity of 7,500 pounds or less.
- (3) All cargo operations with airplanes other than turbojet powered airplanes, with a payload capacity of 7,500 pounds or less.
 - (4) VFR helicopters operations.
- B. A foreign air carrier who is also authorized to conduct VFR enroute operations with large airplanes must also be issued OpSpec B051.
- C. The purpose of OpSpec B056 is to provide a higher level of safety in international air service or international air transportation operations by imposing certain restrictions and limitation above those that would normally be imposed by part 91 alone, and that are in accordance with those imposed on similarly situated U.S. operators operating under part 135. Enroute operations may be operated under the VFR requirements of part 91, except that the foreign air carrier shall comply with the following additional minimum altitude, visibility, and operating limitations:
- (1) Minimum altitudes Except when necessary for takeoff and landing, no foreign air carrier may operate under VFR in:

(a) An airplane

- i. During the day below 500 feet above the surface or less than 500 feet horizontally from any obstacle; or
- ii. At night at an altitude less than 1,000 feet above the highest obstacle within a horizontal distance of 5 statute miles from the course the air carrier intends to fly or in designated mountainous terrain less than 2,000 feet above the highest obstacle within a horizontal distance of 5 statute miles from the course the air carrier intends to fly.
- (b) A helicopter over a congested area at an altitude less than 300 feet above the surface.

(2) Visibility requirements –

- (a) No foreign air carrier may operate an airplane under VFR in Class G airspace when the ceiling is less than 1,000 feet unless flight visibility is at least 2 miles.
- (b) No foreign air carrier may operate a helicopter under VFR in Class G airspace at an altitude of 1,200 feet or less above the surface or within the lateral boundaries of the surface areas of Class B, Class C, Class D,

or Class E airspace designated for an airport unless the visibility is at least –

- i. During the day--1/2 mile; or
- ii. At night--1 mile.
- (c) No foreign air carrier may operate a helicopter under VFR unless the pilot has visual surface reference or, at night, visual surface light reference, sufficient to safely control the helicopter.
- (3) Fuel requirements no foreign air carrier may begin a flight operation under VFR in:
- (a) An airplane, unless taking into account both the meteorological conditions and any delays that are expected in flight, the airplane carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies and as a minimum, the fuel requirements specified in Annex 6, Part I, 4.3.6.2 shall be met.
- (b) A helicopter, unless taking into account both the meteorological conditions and any delays that are expected in flight, the helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies and as a minimum, the fuel requirements specified in Annex 6, Part III, 2.3.6.2 shall be met.
- D. The Inspector may select several options for the type of VFR navigation for Opspec B056 in "Select Data" based on the guidance in Order 8400.10, volume 4, chapter 1, section 3:
 - (1) Station Referenced;
 - (2) Pilotage;
 - (3) Station Referenced and Pilotage.
- E. OpSpec B056 must also be listed for each area in OpSpec B050 the VFR enroute operations are authorized. Before issuing OpSpec B056 to a foreign air carrier, the POI will:
- (1) Ensure that the State of the Operator authorizes the foreign air carrier for VFR Class I navigation using Station Referenced and/or Pilotage.
- (2) Ensure that, if the State of the Operator authorizes Station Referenced VFR Class I navigation, the State of the Operator prohibits VFR Pilotage operations or the requirements in Order 8400.10, volume 4, chapter 1, section 3 indicate that Station Referenced VFR navigation is indicated, then the foreign air carrier must have the necessary radio navigation equipment installed to conduct VFR station-referenced Class I navigation in accordance with Order 8400.10, volume 4, chapter 1, section 3

677. PART C OPERATIONS SPECIFICATIONS - AIRPLANE TERMINAL INSTRUMENT

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PROCEDURES AND AIRPORT AUTHORIZATIONS AND LIMITATIONS. The FAA issues Part C operations specifications (OpSpecs) to foreign air carriers who conduct airplane operations under Title 14 of the Code of Federal Regulations (14 CFR) part 129. The FAA does not issued Part C Opspecs to foreign air carriers who conduct only helicopter operations. Instrument Flight Rules (IFR) helicopter operators are issued Part H OpSpecs. The FAA does not usually issue Part C OpSpecs to Part 129 on-demand operators who are restricted to Visual Flight Rules (VFR) only operations; however, in rare situations, inspectors do issue OpSpec C070 of Part C to Part 129 VFR only operators who conduct scheduled operations.

OPSPEC C050 - SPECIAL PILOT-IN-COMMAND QUALIFICATION AIRPORTS (REQUIRED FOR ALL FOREIGN CARRIERS CONDUCTING IFR OPERATIONS).

- A. General. This OpSpec is issued to authorize the foreign air carrier to operate to U.S. special airports, designated as Special Pilot-In-Command (PIC) Qualification Airports by the Federal Aviation Administration (FAA). Additionally this paragraph imposes the same requirements regarding Special PIC Qualification Airports that would be imposed on a U.S. carrier for operations in accordance with 14 CFR section 121.445, in an attempt to ensure an equivalent level of safety. This OpSpec applies to:
- (1) Scheduled operations conducted using turbojetpowered airplanes or airplanes having a passenger-seat configuration of more than 9 passenger seats, excluding each crewmember seat.
- (2) Any operation with large aircraft as defined in OpSpec A002 of the air carrier's OpSpecs.
- B. This OpSpec and associated guidance also represents part of a new process for updating and maintaining a current Special PIC Qualification Airport List and notification to the foreign air carrier. Advisory Circular 121.445-1D, Pilotin-Command Qualifications for Special Area/Routes and Airports, dated June 20, 1990, was cancelled and OpSpec C050 was put into place.
- C. The current Special PIC Qualification Airports airport list is maintained on the following web site: http://www.opspecs.com/ops/SpecialPICAirports/. The list is also maintained in the Operations Specifications Subsystem (OPSS) guidance subsystem in association with OpSpec C050 for those carriers that have access to OPSS through Industry Operations Specifications (IOPSS).
- D. The FAA has designated certain airports in the United States as Special Pilot Qualification Airports due to items such as surrounding terrain, obstructions, or complex approach or departure procedures. The foreign air carrier is only authorized to conduct IFR operations into U.S. airports listed as Special Pilot Qualification Airports with large

aircraft as defined in OpSpec A002, turbojet-powered airplanes, or airplanes having a passenger-seat configuration of more than 9 passenger seats, excluding each crewmember seat, in accordance with the following provisions:

- (1) The foreign air carrier may not use any person, nor may any person serve, as PIC to or from a U.S. airport determined to require special airport qualifications, as indicated in the FAA's list of Special Pilot Qualification Airports, unless:
- (a) The PIC or second-in-command (SIC) has made an entry to that airport using an aircraft or the entry is simulated using a level D simulator or better in accordance with a qualification program approved/accepted by their CAA, including takeoff and landing, while serving as a pilot flight crewmember within the preceding 12 calendar months, or
- (b) The PIC has qualified by using a pictorial means approved/accepted by the foreign air carrier's Civil Aviation Authority (CAA) for that airport.
- (c) (***Selectable subparagraph C3 in C050***) The PIC or SIC has made an entry to that airport while occupying the flight deck observers seat, they are qualified on the aircraft type and monitor radio communications during the entry, and the procedure is included in the carriers manual, which has been approved/accepted by the State of the Operator CAA
- (d) The restrictions of subparagraph C(1), above, do not apply when an entry (including a takeoff or a landing) to that airport is being made if the ceiling at that airport is at least 1,000 feet above the lowest minimum enroute altitude (MEA) or minimum obstruction clearance altitude (MOCA), or initial approach altitude prescribed for the instrument approach procedure for that airport, and the visibility at that airport is at least 3 miles.
- (2) In reference to subparagraph C(1)(a), above, the pilot-in-command or second-in-command would receive equally valuable familiarization with the Special Pilot-In-Command (PIC) Qualification Airport whether they are the pilot flying (PF) or the pilot not flying (PNF) during the entry. There is no requirement for a pilot to act as PF during takeoff or landing in order for the entry to count towards the requirements of OpSpec C050.
- (3) In reference to subparagraph C(1)(c) above, In order for the pilot to receive a familiarization benefit equal to a pilot who qualifies in a simulator or using pictorial means, in order for the foreign carrier to use the provision of C(1)(c), the foreign carriers manual needs to clearly spell out the procedures used by a pilot occupying the flight deck for the purposes of qualification at U.S. Special PIC Qualification Airports. The foreign carrier shall provide their assigned International Field Office (IFO) with a copy of this procedure and evidence of approval/acceptance by the State of the Operator CAA. Subparagraph C3 in OpSpec C050,

which specifies this provision, is a selectable subparagraph that must be selected at the "select data" screen in OPSS or IOPPS during paragraph preparation.

E. This OpSpec is issued to all foreign air carriers conducting IFR operations into the U.S. and establishes provisions the foreign air carrier must comply with to operate to Special PIC Qualification Airports.

OPSPEC C051 - TERMINAL INSTRUMENT PROCEDURES (REQUIRED FOR ALL AIR CARRIERS CONDUCTING IFR OPERATIONS).

- A. The FAA issues Opspec C051 to all foreign air carriers that operate airplanes and who conduct any flight operations under IFR. This paragraph provides direction and guidance on acceptance of U.S. terminal instrument procedures. This OpSpec also provides additional guidance to the foreign air carrier for converting any takeoff and landing minimum expressed in the metric linear measurement system to the U.S. standard linear measurement system.
- B. This paragraph requires no inspector input. Additional information concerning terminal instrument procedures is contained in Order 8400.10, volume 4, chapter 2, section 3.

OPSPEC C052 - BASIC INSTRUMENT APPROACH PROCEDURE AUTHORIZATIONS - ALL AIRPORTS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

- A. OpSpec C052 specifies the types of instrument approaches the foreign air carrier is authorized to conduct and prohibits the use of other types of instrument approaches. Before authorizing a type of instrument approach procedure, the Principal Operations Inspector (POI) must ensure that the foreign air carrier has established the aircraft system eligibility and that its manual, which the State of the Operator must have approved/accepted, includes both flightcrew training and procedures, as applicable, for the types of approaches to be authorized. All the approaches authorized by OpSpec C052 must be published in accordance with 14 CFR Part 97.
- B. OpSpec C052 may authorize three types of instrument approach procedures:
- (1) Column one provides for the authorization of non-precision instrument approach procedures without vertical guidance (approaches other than Instrument Landing System (ILS) and Microwave Landing System (MLS)). Flightcrews must conduct non-precision approaches in accordance with approved procedures that assure descent will not go below minimum descent altitude

(MDA) unless the required visual references for continuing the approach are present (reference 14 CFR Section 91.175).

- (2) Column two provides for the authorization of precision-like instrument approach procedures with vertical guidance (approaches other than ILS and MLS). These are called precision-like approaches because they provide vertical guidance but are not as accurate as true precision approaches. Flightcrews must conduct these precision-like approach procedures using a foreign CAA-approved method that allows descent to a published decision altitude (DA).
- (3) Column three provides for the authorization of precision instrument approach procedures (ILS, MLS, and GLS approaches) that provide vertical guidance.
- C. Barometric Vertical Navigation (BARO-VNAV) approach operations (referred to as area navigation (RNAV) with vertical guidance) may be authorized for all applicable foreign air carriers in accordance with the guidance contained in Order 8400.10, volume 4, chapter 2, section 4 and AC 120-29A, Criteria for Approval of Category I and Category II Weather Minima for Approach.
- (1) Foreign air carrier approval. Once a foreign air carrier has established the aircraft system eligibility and the flightcrew training and checking requirements in the manual that the State of the Operator has approved/accepted, as applicable, the POI may give approval using this RNAV equipment to fly to the lateral navigation (LNAV)/VNAV DA as shown on the published instrument approach procedure (IAP).
- (2) To authorize these precision-like approaches that provide vertical guidance, select "RNAV (GPS)" for insertion into column two of C052.
- D. Precision Runway Monitoring (PRM) Approaches. AC 90-98, Simultaneous Closely Spaced Parallel Operations Airports Using Precision Runway Monitor Systems (PRM), and the Aeronautical Information Manual (AIM) speak to PRM operations. PRM enables simultaneous operations to parallel runways spaced closer than 4,300 feet apart in instrument meteorological conditions (IMC). Foreign air carriers will be authorized PRM approaches in OpSpec C052. Definitions of ILS/PRM and Localizer-type Directional Aid (LDA)/PRM have been added to OpSpec A002. Two types of instrument approach procedures with PRM are currently in use:
- (1) *ILS/PRM*. This operation comprises two ILSs, each aligned with its respective runway and parallel to each other. ILS/PRM permits simultaneous instrument approach operations to parallel runways spaced less than 4,300 feet apart, but not less than 3,000 feet.
- (2) LDA/PRM (Simultaneous Offset Instrument Approach (SOIA)). This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset

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(no more than 3 degrees) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but not less than 750 feet. Because of the offset, this operation is also known as a SOIA.

- E. PRM. The FAA began the Multiple Parallel Approach Program to research whether simultaneous instrument landing system (ILS) approaches to parallel runways would improve capacity. The objective was to achieve improvements in airport arrival rates through the conduct of simultaneous close spaces parallel approaches. That objective is being met using PRM.
- (1) ILS/PRM and LDA/PRM Approaches. Where parallel runway centerlines are 4,300 feet apart or less, but not less than 3,000 feet, simultaneous ILS approaches may be conducted. Similarly, where parallel runway centerlines are 3,000 feet apart or less, but no less than 750 feet, simultaneous offset instrument approaches (SOIA) may be conducted with ILS approaches. Those approaches are labeled "ILS/PRM" and "LDA/PRM," respectively, on instrument approach charts. Air traffic control (ATC) provides an air traffic controller using special PRM radar during these approaches. That controller is known as the final monitor controller.
- (2) The Breakout Maneuver. Working with industry, the FAA conducted extensive analysis of simulation data and determined that the implementation of PRM and SOIA approach operations to closely spaced parallel runways requires additional crew training. The primary focus of this training is to raise each pilot's situational awareness in ILS/PRM and LDA/PRM operations. Flightcrews must fly the breakout maneuver manually.
- (a) *Traffic Alert*. One important element of the additional training is the pilot's understanding of the difference between a normal missed approach initiated by a pilot and a breakout initiated by a PRM final monitor controller. It must be clear to flightcrews that when the final monitor controller uses the words "Traffic Alert," the controller will then give critical instructions that the pilot must act on promptly to preserve adequate separation from an airplane straying into the adjoining approach path.
- (b) ATC Breakout Maneuver Command to Turn and/or Descend, Climb, or Maintain Altitude. The flight-crew must immediately follow the final monitor controller's vertical (climb/descend/maintain altitude) and horizontal (turn) commands. If the flightcrew is operating Traffic Alert and Collision Avoidance System (TCAS) in the traffic advisory (TA)/resolution advisory (RA) mode and receives a TCAS RA at any time while following the final monitor controller's command, the flightcrew will simultaneously continue to turn to the controller's assigned heading and follow the vertical guidance provided by the TCAS RA.

(c) Time-to-Turn Standard. Regardless airplane type, tests and data analysis revealed that pilots must be able to achieve a rate of turn of 3 degrees per second within 8 seconds of receiving a breakout command. The air carrier must show that its pilots can readily meet this time-to-turn standard before the POI will authorize ILS/ PRM or LDA/PRM approaches in OpSpec C052. The FAA requires Flightcrews to manually fly the breakout maneuver unless AFS-200 approves another breakout procedure (AFS-400 concurrence is required to approve breakout in auto modes). The air carrier should demonstrate its ability to meet this standard by having representative pilots perform the breakout maneuver while the POI or the POI's designated representative observes. The demonstration should conform to procedures contained in the air carrier's approved operating manual for its flightcrews.

NOTE: In a breakout, ATC will never command a descent below the applicable minimum vector altitude (MVA), thus assuring that no flight will be commanded to descend below 1,000 feet above the highest obstacle during a breakout.

- (3) ILS/PRM, LDA/PRM, and the Use of TCAS. TCAS may be operated in TA/RA mode while executing ILS/PRM or LDA/PRM approaches. However, when conducting these operations, pilots must understand that the final monitor controller's instruction to turn is the primary means for ensuring safe separation from another airplane. Pilots must bear in mind that TCAS does not provide separation by commands solely in the vertical plane. Therefore, during final approach only the final monitor controller has the capability to command a turn for lateral separation. Flightcrews are expected to follow any ATC instruction to turn.
- (a) ATC command to turn with TCAS RA. In the unlikely event that a flightcrew should simultaneously receive a final monitor controller's command to turn and a TCAS RA, the flightcrew must follow both the final monitor controller's turn command and the TCAS RA's climb or descent command.
- (b) TCAS RA alone. In the extremely unlikely event that an RA occurs without a concurrent breakout instruction from the final monitor controller, the pilot should follow the RA and advise the controller of the action taken as soon as possible. In this instance, it is likely that a breakout command would follow.
- (c) *TCAS not required*. An operator does not need an operative TCAS to conduct ILS/PRM or LDA/PRM approaches.
- (4) Required and recommended training for ILS/ PRM and LDA/PRM approaches. A foreign air carrier must include required training in its training program and the State of the Operator must approve that training before the

FAA may authorize either or both PRM approaches in OpSpec paragraph C052. Flightcrews must accomplish required ground training before conducting ILS/PRM or LDA/PRM approaches.

- (a) Initial ground training -- REQUIRED.
- i. This training must include all elements of the "ATTENTION TO ALL USERS" page of an ILS/PRM or an LDA/PRM as authorized, along with viewing the latest version of the PRM video. (See video at: www.faa.gov/avr/afs/prmtraining/, or contact FAA Flight Standards at (202) 267-8166 for the most current version.)

NOTE: The FAA does not require flightcrews trained previously in PRM operations under earlier guidance to re-qualify with each new version of the PRM video.

- ii. The ground portion of the training program must support the following knowledge objectives. Each flight crewmember must:
 - Describe the PRM system to include the meaning of "no transgression zones."
 - Know that an airplane on an adjacent approach path may be less than 4,300 feet away and may be flying at a different speed.
 - Know that the automatic terminal information service (ATIS) broadcasts a pilot advisory when ILS/PRM or LDA/PRM approaches are in progress.
 - Identify the differences between ILS/PRM approach charts and normal ILS approach charts, including the special instruction pages for ILS/PRM.
 - Explain the unique communication requirements (equipment and procedures) for ILS/PRM and LDA/PRM approaches.
 - Know that an unpublished missed approach instruction that ATC may issue prior to published missed approach points is called a "breakout."
 - Know that a breakout may include instructions to descend and that the descent will be to no lower than the minimum vector altitude (MVA) for the sector. The MVA guarantees 1,000 feet above the highest obstruction in that sector. The rate of descent that controllers expect is not more than 1,000 feet per minute.
 - Know that a pilot must initiate a breakout maneuver manually and immediately upon

- hearing the "Traffic Alert" command from ATC, and that adequate separation requires that the pilot establish a 3-degree-persecond rate of turn within 8 seconds.
- Know that the three areas (ATIS, Dual VHF Comm. Required, and All "Breakouts") in the "ATTENTION TO ALL USERS PAGE" must be briefed (in flight) prior to conducting an ILS/PRM or an LDA/PRM approach.
- Know that flightcrews may operate TCAS in the TA/RA mode when conducting PRM approaches, including the following points:
 - When an RA occurs with a concurrent ATC breakout command – follow the turn required in the ATC instructions; follow the climb or descent in the RA command (split commands)
 - When an RA occurs without a concurrent ATC breakout command follow the RA and contact ATC as soon as practical
 - TCAS provides only vertical resolution to aircraft conflicts
 - An operative TCAS is not required for PRM operations
- Know procedures for simultaneous offset instrument approaches (SOIA), including the following points:
 - A visual segment of the LDA/PRM approach is established prior to the LDA missed approach point (MAP) to permit:
 - Visual acquisition of the ILS traffic to the parallel runway and advising ATC
 - Visual acquisition of the runway environment
 - LDA course is maintained until the MAP. At the MAP, the pilot must have the ILS traffic in sight and the runway environment in sight, or fly the missed approach.
 - At the MAP with the ILS traffic and the runway in sight, the pilot may continue to a landing:
 - Maneuver to align with the runway centerline
 - Stabilize on glide path no lower than 500 feet above TDZ

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Avoid wake turbulence from the ILS traffic

iii. Testing of these knowledge objectives is recommended.

(b) Initial flight training -

REQUIRED:

· Breakout maneuver

NOTE 1:Initial breakout flight training must focus on the descending breakout.

NOTE 2:Air carriers who currently hold OpSpec approval to conduct PRM approaches have 12 months from the effective date of HBAT 03-03 (05/29/03) to initiate breakout flight training, and must complete training by the end of the next full training cycle.

NOTE 3:Air carriers applying for initial approval to conduct PRM approaches must complete breakout flight training by the end of the next full training cycle after receiving OpSpec approval.

NOTE 4: The FAA may authorize air carriers to conduct ILS/PRM approaches, LDA/PRM approaches, or both. The FAA does not require duplicative flight training in the breakout maneuver (i.e., breakout covered in flight training for ILS/PRM is creditable toward the LDA/PRM, and vice versa).

NOTE 5:All air carriers who provide breakout training to flightcrews prior to the effective date of HBAT 03-03 are not required to requalify.

LDA/PRM approach

RECOMMENDED: ILS/PRM approach (if authorized on OpSpecs)

(c) Recurrent ground training.

REQUIRED:

- Review of the ground training elements and the video in (a) above and testing in those elements.
- (d) Recurrent flight training.

REQUIRED: None.

RECOMMENDED:

- ILS/PRM approach
- · LDA/PRM approach
- Breakout

- (5) Authorizing ILS/PRM approaches and LDA/PRM approaches for 14 CFR part 129 foreign air carriers. A part 129 foreign air carrier operating in the United States may be authorized in OpSpec C052 to conduct ILS/PRM approaches and/or LDA/PRM approaches if:
- (a) That foreign air carrier meets the ground and flight training requirements contained in paragraphs (4)(a) through (c) above;
- (b) The CAA for the foreign air carrier **authorizes** these type approaches; and
- (c) The air carrier's POI determines the following:
- i. That a point of contact for the foreign air carrier's Civil Aviation Authority (CAA) has been established in the foreign air carrier's OpSpec A006(c) and
- ii. The IFO/FSDO has notified the International Programs and Policy office, AFS-50, that the foreign air carrier is authorized to conduct PRM approaches.

NOTE: AFS-50 must notify FAA Air Traffic Procedures, ATP-100, of each foreign air carrier authorized to conduct PRM approaches.

OPSPEC C053 - STRAIGHT-IN CATEGORY I APPROACH PROCEDURES OTHER THAN ILS, MLS, OR GLS- IFR LANDING MINIMUMS - ALL U.S. AIRPORTS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

A. The FAA shall issue OpSpec C053 to all foreign air carriers conducting IFR operations with airplanes. This paragraph specifies the lowest landing minimums that air carriers can use for Category I nonprecision approach procedures other than ILS, MLS, or GPS Landing System (GLS) at all airports. To authorize Straight-In Category I ILS, MLS, or GLS Approach Procedures and IFR Landing Minimums, OpSpec C074 must be issued. The previous nonprecision approaches as "approaches other than ILS, MLS, or GPS Landing System (GLS)."

B. This paragraph requires no inspector input. Additional information concerning terminal instrument procedures is contained in volume 4, chapter 2, section 3.

OPSPEC C054 – SPECIAL LIMITATIONS AND PROVISIONS FOR INSTRUMENT APPROACH PROCEDURES AND IFR LANDING MINIMUMS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

A. OpSpec C054 specifies the visibility requirements that a foreign carrier must comply with in order to initiate or continue an instrument approach in U.S. airspace. It also specifies that before a foreign air carrier conducting operations with turbojet airplanes may conduct an

instrument approach with visibility conditions reported to be below 3/4 mile or RVR 4000 (basic turbojet landing minimums):

- (1) the pilots must be specifically qualified and authorized to use the lower landing minimums, and
- (2) certain runway landing performance, lighting, and marking requirements must be met.
 - B. This paragraph requires no inspector input.

OPSPEC C055 - ALTERNATE AIRPORT IFR WEATHER MINIMUMS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

- A. The FAA shall issue OpSpec C055 to all foreign air carriers who conduct IFR operations with airplanes. This paragraph provides a three part table from which the operator, during the initial dispatch or flight release planning segment of a flight, derives U.S. alternate airport IFR weather minimums in those cases where it has been determined that an alternate airport is required.
- B. The first part of the table is for airports with at least one operational navigational facility providing a straight-in nonprecision approach procedure, or a straight-in precision approach procedure, or, when applicable, a circling maneuver from an instrument approach procedure. The required ceiling and visibility is obtained by adding 400 feet to the CAT I Height Above Touchdown (HAT) or, when applicable, the authorized Height Above Airport (HAA) and by adding 1 statute mile (s.m.) to the authorized CAT I landing minimum.
- C. The second part of the table is for airports with at least two operational navigational facilities, each providing a straight-in nonprecision approach procedure or a straight-in precision approach procedure to different suitable runways. The required ceiling and visibility is obtained by adding 200 feet to the higher CAT I HAT of the two approaches used and by adding 1/2 s.m. visibility to the higher authorized CAT I landing minimum of the two approaches used.
- D. In some cases, it is possible to have higher alternate minimums when using two operational navigational facilities than when using one. For example, an airport with one straight-in nonprecision approach procedure with a HAT of 400 feet and 1 s.m. visibility would have alternate minimums of 800 feet and 2 s.m. visibility (400 feet + 400 feet and 1 s.m. + 1 s.m.). On the other hand, an airport with two straight-in approaches, one which is a straight-in precision approach with a HAT of 200 feet and 1/2 s.m. visibility and the other a straight-in nonprecision approach with a HAT of 700 feet and 1 s.m. visibility, would have alternate minimums of 900 feet and 1 1/2 s.m. visibility (200 feet + 700 feet and 1/2 s.m. + 1 s.m.). Since the OpSpecs require that the operator use the higher ceiling and visibility, the minimums for the airport with two straight-in

approaches are higher than for the airport with only one straight-in approach. When this situation exists, the operator may elect to consider the airport as having only one straight-in approach procedure and may add the higher buffer requirement (400 feet and 1 s.m.) to whichever straight-in approach procedure provides for the lowest possible ceiling and visibility minimums.

- E. The third part of the table is for airports with a published CAT II or CAT III approach, and at least two operational navigational facilities, each providing a straightin precision approach procedure to different, suitable runways. The ceiling and visibility required for CAT II procedures is a ceiling of at least 300 feet HAT and a visibility of at least RVR 4000, or for CAT III procedures, a ceiling of at least 200 feet HAT and a visibility of at least RVR 1800. Foreign air carriers having that capability may take credit for CAT II/III-qualified aircraft and adjust minimums accordingly. The alternate minimums are based on CAT III engine inoperative requirements.
- (1) The following are some but not all of those requirements. See the criteria in AC 120-28D engine inoperative, for further requirements.
- (a) The aircraft is capable of engine inoperative CAT III.
- (b) The carrier has established appropriate procedures.
- (c) Performance and obstruction clearance information has been provided to the flightcrew.
- (d) Appropriate aircraft configuration, wind limits, and other appropriate information is provided to the flightcrew.
- (2) Before authorizing the CATII/III table the POI shall ensure through documentation that the foreign air carrier has provided that (a) through (d) above are met and the air carrier's civil aviation authority (CAA) authorizes it for CATII/III alternate minimum. If the foreign air carrier does not meet the preceding conditions, enter "N/A" in the ceiling and visibility blocks of table 3.
- F. Except for Extended Range Operations (ER-OPS)(ETOPS), when two suitable runways are required, they may be the different ends of the same physical runway surface, provided two independent operational navigational facilities serve the runway ends. When using an airport as an alternate in ER-OPS operations, two separate physical surfaces must be used, each provided with independent operational navigational facilities. For example an airport with a single runway 4-22, with an ILS approach serving runway 4 and a VOR approach to runway 22, would meet the requirements of paragraph B above and the second part of the table in OpSpec C055. To meet the requirements of paragraph D above and the third part of the table in OpSpec C055, both runway 4 and 22 would need to be served by independent operational navigational facilities providing

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either a Cat II or III precision approach procedure as appropriate. In this example, this same airport could not be used as an ER-OPS/ETOPS alternate. A different airport with two separate runways, and with separate physical runway surfaces must be used. The words *suitable runway*, for the purposes of OpSpec C055, is derived from AC 120-42, Extended Range Operation, and is defined in OpSpec A002

OPSPEC C056 - IFR TAKEOFF MINIMUMS (LARGE AIRPLANES) AND C057 - IFR TAKEOFF MINIMUMS (SMALL AIRPLANES) ALL U.S. AIRPORTS AND ALTERNATE AIRPORTS FOR DEPARTURE (OPTIONAL).

- A. This section contains information that operations inspectors should use concerning lower-than standard takeoff minimums for foreign air carriers. The FAA issues OpSpec C056 to all foreign air carriers who conduct IFR operations with large airplanes as defined in OpSpec A002. If a foreign air carrier conducts operations with small airplanes as defined in OpSpec A002 or both large and small airplanes, then OpSpec C057 will also need to be issued. These OpSpecs contain specific guidance regarding pilots, aircraft, and airports when lower-than-standard takeoff minimums are used.
- B. Training. The POI shall ensure that foreign air carriers requesting lower-than-standard takeoff minimums provide documentation that their flightcrew training program, approved by their Civil Aviation Authority, includes all procedures contained in OpSpec C056 and that the lower than standards minimums have been approved by the State of the Operator.
- (1) That training program must contain at least the following, as applicable:
 - Rejected takeoffs in a low visibility environment
 - Engine failure at V1 in low visibility
 - Taxiing in a low visibility environment with emphasis on preventing runway incursion
 - · Critical areas
 - · Crew coordination and planning
 - · Dispatcher training
 - Procedures for operators not using dispatch systems
 - Required ground-based visual aids (such as stop bars, taxiholding position lights)
 - Required ground-based electronic aids (such as ILS/MLS transmissometers)
 - Determination of takeoff alternate airports, as applicable

(2) Flight Training Maneuvers for Takeoffs.

- (a) For low visibility takeoff (RVR less than 2400 RVR), the following maneuvers and procedures should be addressed (may be combined) as referenced in the latest version AC-120-29:
 - i. Normal takeoff,
- ii. Rejected takeoff from a point prior to V1 (including an engine failure),
- iii. Continued takeoff following failures including engine failure, and any critical failures for the aircraft type which could lead to lateral asymmetry during the takeoff,
- iv. Limiting conditions. The conditions under which these normal and rejected takeoffs should be demonstrated include appropriate limiting cross winds, winds, gusts, and runway surface friction levels authorized.
- (b) A demonstration should be done at weights or on runways that represent a critical field length.
- C. When issuing OpSpec C056, no further action in the OPSS system is required of the POI. When issuing OpSpec C057, the POI must select one and/or two options in OPSS select data screen and the click on the load data button:
- (1) "Load when take-off minimums are equal to or less than the applicable standard take-off minimum."
- (2) "Load when take-off minimum is lower than standard (must also select above statement)"

OPSPEC C059 - CATEGORY II INSTRUMENT APPROACH AND LANDING OPERATIONS (OPTIONAL).

- A. The FAA authorizes Category II (CAT II) operations for foreign air carriers in the United States by the issuance of OpSpec C059. Before the FAA issues OpSpec C059, each foreign air carrier and each airplane type used by that foreign air carrier require approval by the State of the Operator. CAT II operations in the United States are evaluated for approval in accordance with this guidance, which relates only to foreign carriers, and in accordance with the following guidance:
- (1) Advisory Circular (AC) 120-29 (as amended), "Criteria for Approval of Category I and Category II Weather Minima for Approach."
- (2) Order 8400.10, volume 4, chapter 2, All-Weather Terminal Operations (presently in HBAT 03-08).
- (3) For foreign registered airplanes, a lower landing minima (LLM) maintenance program approved by the State of the Operator and for U.S. registered airplanes a LLM maintenance program approved by the FAA in accordance with Order 8300.10, Airworthiness Inspector's Handbook,

volume 2, chapter 3, in coordination with the principal avionics and maintenance inspectors.

- (4) Approval of the State of the Operator is also required before amending OpSpec C059 to include an airplane make/model/series new to the foreign air carrier.
- B. In addition to the standard U.S. CAT II operations authorized by OpSpec C059, the FAA can authorize nonstandard U.S. CAT II operations to qualifying runways that do not meet the performance or equipment requirements normally associated with a compliant CAT II operation (e.g., touchdown zone lighting (TDZ), centerline lighting (CL), or Approach Lighting System with Sequenced Flashing Lights (ALSF)-1 & 2) by issuing the nonstandard OpSpec C359. Specific guidance for this nonstandard CAT II authorization is found in:
- (1) Order 8400.10, volume 2, chapter 4, section 2, Paragraph 290, Part C, OpSpec C359, Special Authorization

for Certain Category II Operations at U.S. Specifically Approved Facilities, and

- (2) Order 8400.13, Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations.
- C. Each airplane type (make/model/series) used in CAT II operations must be listed in Table 1 of C059 and have an acceptable LLM maintenance program approved by the State of the Operator and in the case of U.S. registered airplanes, it must be approved by the the FAA in accordance with 14 CFR 129.14. The lowest decision height (DH) and lowest runway visual range (RVR) authorized for each airplane type must also be specified. The following example illustrates the method for authorizing each airplane in OpSpec C059:

CAT II Approach and Landing Minimums			
Airplane (Make/Model/Series)	DH Not less Than	Lowest Authorized RVR	
AIRBUS 300 A300B4103	100 Ft	1200	
BOEING 727 217	100 Ft	1600	
DOUG DC9 31	100 Ft	1600	
DOUG DC9 32	100 Ft	1600	
DOUG DC9 51	100 Ft	1600	
DOUG DC9 81	100 Ft	1200	
LKHEED 1011 385114	100 Ft	1200	
BOEING 777-200	100 Ft	1000	

Figure 2.6.2.5. Sample Table 1.

- D. CAT II operations, with a decision height of 100 feet and RVR 1000 (300m) (lower than standard) may be authorized at certain domestic type III facilities when:
- (1) An autoland approach or head-up guidance system (HGS) is used to touchdown;
- (2) The airplane and its automatic flight control guidance system or manually flown guidance system are approved for approach and landing operations in the approved AFM for CAT III.
- (3) Flightcrews are trained and checked in accordance with the foreign air carriers approved training program for Lower than Standard CAT II operations authorized with a decision height of 100 feet and RVR 1000 feet (300 meters), and these minimums are approved by the State of the Operator. If the flightcrew is currently authorized CAT III operations, no further training is required for this authorization in C059.
- (4) The autopilot and approach coupler, or HGS system, is listed in the required CAT II airborne equipment (Table 2) of this OpSpec;

- (5) Equipment is flown in the HGS CAT III mode(s) of operation or autoland to touchdown, as appropriate;
- (6) The authorization for RVR 1000 is listed in Table 1 of OpSpec C059.
- (7) The notation of HGS CAT III mode(s) of operation or autoland, as appropriate, is listed in the "Additional Equipment and Special Provisions" column of Table 2.
- E. Table 2 of OpSpec C059 specifies the equipment required to conduct manually flown or automatically flown CAT II operations for each airplane make/model/series. The equipment required is established in accordance with the applicable regulations, the approved Aircraft Flight Manual (AFM) (if applicable), Order 8400.13, and AC 120-29, as amended. There are two acceptable methods of demonstrating that an airplane is airworthy for CAT II operations. These acceptable methods are "type design approval," obtained by a manufacturer or STC holder, or an "operational demonstration," conducted by a foreign air carrier.
- (1) *Type Design Approval*. The approved AFM (or flight manual supplement), for airplanes that have CAT II type design approval, contains a statement that the airborne systems have demonstrated the reliability and redundancy

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necessary for CAT II operations in accordance with AC 120-29 (or previous versions or referenced equivalent documents). Approved flight manuals also specify that certain equipment is required for airworthiness approval of the various kinds of CAT II operations. Some of the approved flight manuals also indicate that acceptable CAT II performance was demonstrated both with, and without, certain equipment (e.g., "autothrottles w/wo"). AC 120-29, as amended, also specifies that certain types of equipment are required for operational approval of the various kinds of CAT II operations (manual/autopilot). Therefore, both the approved AFM and AC 120-29, as amended, must be considered in determining if the additional equipment requirement must be listed (specified) in Table 2 of OpSpec C059. The illustration below shows how the additional or required equipment should be listed in Table2 of OpSpec C059.

- (a) Equipment that is explicitly required by the airplane certification regulations (14 CFR parts 23 and 25 or foreign equivalent), the operating regulations (14 CFR parts 91 and 129) and/or the approved AFM **SHOULD NOT BE LISTED** in Table 2. The standard text of OpSpec C059 requires that this equipment be functional. Therefore, the additional equipment or operational requirement that must be listed (specified) in OpSpec C059 is determined by cross-checking the type of equipment required by AC 120-29 and/or order 8400.13, as amended, for the kinds of CAT II operations proposed, against the equipment required by regulations and the approved AFM.
- i. The equipment listed in Table 2 of OpSpec C059 as additional equipment is only that equipment not explicitly required by regulations and/or the AFM that is required by AC 120-29, as amended, a Supplemental Type Certificate (STC), etc., and/or Order 8400.13, as applicable, for the kind(s) of CAT II operations to be authorized.
- ii. RVR 1000 authorization at certain domestic CAT III facilities must be noted in the listing (Table 2) of the additional equipment for CAT II and it must be noted in the remarks column of Table 2 that the equipment is to be flown in the autoland or HGS CAT III mode(s) of operation. Precision CAT II landing minimums are authorized only for autoland or HGS-equipped aircraft when operated by a properly qualified flightcrew and flown in the HGS CAT III mode(s) of operation. AC 120-29, as amended, contains additional guidance.
- (b) When the AFM indicates acceptable performance both with and without (w/wo) certain items of equipment (which are not explicitly required by AC 120-29, as amended), it must be determined how the foreign air carrier intends to conduct CAT II operations and train flightcrews with those items of equipment. If the foreign air carrier proposes to conduct operations both with and without certain items of equipment (such as autothrottle or autopilot), flightcrews must be trained for both situations

and the item of equipment does not need to be listed in Table 2 of OpSpec C059.

- (2) Equipment Eligibility that is Not Stated in the AFM, the AFMS, or the Flight Standardization Board (FSB) Report. The operational demonstration method of demonstrating the airworthiness of CAT II equipment is only appropriate for airplanes and equipment that do not have CAT II type design approval. The operational demonstration must be conducted in accordance with AC 120-29, as amended. A part 129 foreign air carrier should request that its Flight Standards District Office (FSDO) or International Field Office (IFO) provide assistance in the eligibility assessment.
- (a) The foreign air carrier should provide the IFO with the aircraft make, model, and serial number, any evidence of instrument flight rules (IFR) approach approval, and pertinent information from flightcrew operating procedures.
- (b) If the IFO is unable to determine equipment eligibility from the approved documentation,
- i. For U.S. registered aircraft, the IFO should forward the request and supporting data through its FAA Flight Standards Regional Division to the appropriate Aircraft Evaluation Group (AEG). The AEG will verify that the aircraft and its landing system meet the criteria for CAT II operations, and that the system can safely fly the CAT II approach procedures. The AEG will provide written documentation (e.g., amended FSB Report or other official documentation) to verify the eligibility of that equipment.
- ii. For foreign registered aircraft the Foreign air carrier should forward the request and supporting data to the appropriate State Civil Aviation Authority to verify eligibility of equipment.
- F. For U.S. CAT II authorization the foreign air carrier must have an acceptable LLM maintenance program.
- (1) For U.S. registered airplanes this LLM maintenance program shall be in accordance with Order 8300.10, volume 2, chapter 3, and must be approved by the FAA in accordance with 14 CFR Section 129.14. This LLM maintenance program should be coordinated with the principal airworthiness and avionics inspectors.
- (2) For foreign registered airplanes this LLM maintenance program shall be approved by the State of the Operator.
- G. The kind of CAT II operation (manually-flown HGS and/or autopilot) must be specified for each item of equipment listed in Table 2 of OpSpec C059. The following guidelines should be followed for filling out Table 2:
 - CAT II equipment required by the regulations or the approved AFM should **NOT** be listed.

- The required Airborne Equipment table combines the manual and autopilot columns into one column for programming purposes. The principal operations inspector (POI) will select the appropriate phrase, manual, or autopilot.
- If an item of equipment is applicable to a specific airplane's Make/Model/Series (M/M/S) for both manual and autopilot CAT II operations, both
- manual and autopilot can be highlighted and selected for insertion into the column.
- Please note the equipment required for RVR 1000 CAT II authorization is to be listed in the "Additional Equipment" column.
- See the sample of Table 2 below for examples of how the items of equipment should be specified for the kind of CAT II operation.

Figure 2.6.2.6. Example Of Cat II Items Of Equi	pment
Sample Table 2	

Kind of Category II Operation		
Airplane (Make/	Additional Equipment	Manual (HGS)/
Model/Series)	& Special Provisions	Auto Pilot
Boeing 767 219	1. Approach coupler and FD must be operative	
		Auto Pilot
Boeing 757-232	1. An independent FD and display for each	
	pilot (L and R or C and R)	Auto Pilot
Boeing 737-200	None-AFM guidance	Manual (HGS) or
		Auto Pilot

NOTE: NOTE: The following equipment is required by the AFM and SHOULD NOT be listed in table 2 of OpSpec C059:

- One engine inoperative with flaps 20 degrees and manual throttle or 2 engines operative
- One Autopilot
- Two Electronic Attitude Director Indicators (EADI)
- Two Inertial Reference Units (IRU) in NAV mode
- Two sources of electrical power
- H. Authorized Airports and Runways. Table 3 of OpSpec C059 must specify airports and runways for which a foreign air carrier is authorized to conduct Lower Than Standard CAT II operations with a Decision height of 100 feet and RVR 1000 feet (300 meters) operations.
- (1) If the airport and runways are approved for standard CAT II operations in part 97, they should not be routinely listed in Table 3 of OpSpec C059 unless the POI determines there is a need to specify a special limitation for an operator at a particular airport.
- (a) If the CAT II approach procedure is published in the National Aeronautical Charting Office Instrument Approach Procedures (IAP) flight information publication as a CAT II procedure, it is approved under part 97.
- (b) The list of U.S. domestic approved CAT II/III facilities is based on Order 8400.8, Appendix 4, or the current version of Order 8400.13. Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations, can be found on the AFS-410 website.

- (c) Once a facility has been approved, AFS-400 will put that facility on its Web site and notify the requesting carrier, program manager, or their respective POIs of the approval.
- I. Note that in the "Operating Limitations" subparagraph, the crosswind component on the runway of intended landing is limited to 15 knots (or in accordance with the AFM, whichever is more restrictive).
- J. For landing minimums not less than 1200 RVR, the touchdown zone sensor and the rollout sensor of an RVR system are required and must be used. The touchdown zone sensor RVR report is controlling for all operations and the rollout sensor RVR report provides advisory information to pilots. A mid-RVR sensor report, if available, provides advisory information to pilots and may be substituted for the rollout sensor RVR report if the rollout sensor RVR report is not available. Some RVR reporting systems contain four (4) sensors (e.g., touchdown zone, mid, rollout, and far end). In those cases, a far end sensor also provides advisory information to pilots and may be substituted for the rollout sensor RVR report if the rollout sensor RVR report is not available.

OPSPEC C060 - CATEGORY III INSTRUMENT APPROACH AND LANDING OPERATIONS (OPTIONAL). The FAA evaluates Category III (CAT III) operations in accordance with the latest version of AC 120-28, Criteria for Approval of Category III Landing Weather Minima for Takeoff, Landing, and Rollout, equivalent JAA criteria, or the ICAO Manual of All Weather Operations DOC 9365/AN910, as amended. The FAA authorizes CAT III operations by issuing OpSpec C060. Each airplane type (make/model/series) used in CAT III operations must be listed in OpSpec C060 subparagraph a along with the Deci-

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sion Height (DH)/Alert Height (AH), lowest RVR authorized and runway field length factor for the type of CAT III operation authorized. Foreign air carriers requesting authorization for Category III at U.S. airports should meet the following criteria.

- A. Acceptable Criteria. Criteria acceptable for use for assessment of foreign air carrier's applications for Category III at U.S. airports include AC 120-28, equivalent JAA criteria, or the ICAO Manual of All Weather Operations DOC 9365/AN910, as amended. Foreign air carriers previously approved by FAA in accordance with earlier criteria may continue to apply that earlier criteria. Foreign air carriers seeking credit for operations addressed only by the latest revision of AC 120-28 (e.g., CAT III HUD operations) must meet the criteria of this AC, or equivalent criteria acceptable to FAA, for those applicable provisions.
- B. Foreign Air Carrier AFM Provisions. Unless the FAA authorizes otherwise, aircraft used by foreign air carriers for CAT III within the U.S. should have AFM provisions reflecting an appropriate level of CAT III capability as demonstrated to or authorized by FAA, or demonstrated to or authorized by an civil aviation authority (CAA) recognized by FAA, as having acceptable equivalent Category III airworthiness criteria (e.g., European JAA, Canada MOT, UK CAA).
- C. Foreign Air Carrier Category III Demonstrations. Foreign air carriers meeting FAA criteria, or criteria acceptable to FAA (e.g., European JAA, ICAO Criteria including Doc 9365/AN910), and having more than 6 months experience in use of CAT III operations with the applicable aircraft type may be approved for CAT III in accordance with provisions of their own CAA, or in accordance with standard provisions of OpSpec C060, which ever is the more restrictive. The FAA does not require a separate demonstration period if the foreign air carrier's CAA does not require it. However, foreign air carriers authorized in accordance with this provision may nonetheless be subject to additional FAA demonstration for special situations, such as at airports with irregular underlying terrain (see paragraph E), or for aircraft types not having flown to U.S. facilities having CAT III procedures. For foreign air carriers having current U.S. CAT III authorization, the CAT III demonstration period may be reduced or waived for the addition of a new type aircraft to the existing CAT III authority. The demonstration period may be reduced or waived to the extent that the FAA has accepted a successful demonstration for that aircraft type for any other U.S. or foreign air carrier. Foreign air carriers not meeting above provisions may be subject to the demonstration described in paragraphs 10.5.2 and 10.9 of AC 120-28 (equivalent to those necessary for U.S. operators) as the FAA determines applicable.
- D. Issuance of Part 129 OpSpecs. If a foreign air carriers operating to U.S. airports meets the above appli-

cable provisions, the FAA authorizes that air carrier for CAT III by issuing OpSpec C060. Air Carriers intending CAT III operations at U.S.-designated irregular terrain airports, or airports otherwise requiring special assessments must successfully complete those assessments before using those facilities.

E. Use of Certain Restricted U.S. Facilities.

- (1) Foreign air carriers typically use CAT III procedures in the United States which are available as unrestricted public use procedures. However, FAA may also authorize certain restricted public use procedures and special Category III approach procedures for non-U.S. Operators. Typically, these procedures require special airborne equipment capability, special training, or non-standard facility and obstacle assessments. The Category II/III status checklist identifies these special procedures. They are not usually published as a part 97 CAT III SIAP. Foreign air carriers may be eligible to use certain of these procedures if they meet the same special criteria as would apply to a U.S. operator, and if their own CAA approves them specifically for the use of the procedure. Some procedures may not be eligible for foreign air carriers because of other applicable restrictions such as a restriction placed on private facility use. Special or restricted procedures require both FAA authorization and specific authorization from the foreign carrier's CAA for each procedure. This is to ensure that both the operator and foreign CAA are aware of the special provisions needed, and to ensure equivalent safety to use of standard ICAO criteria. Each foreign air carrier seeking CAT III procedure authorization at a facility not published as a standard and unrestricted CAT III SIAP, or at any other facilities that the FAA Category II/III Status checklist identifies as special or restricted, and that carrier's CAA must:
- (a) Be aware of the restrictions applicable to the procedure (e.g., facility status),
- (b) Provide evidence to FAA of the CAA's approval of the foreign air carrier for each special procedure requested, and
- (c) Must have the applicable limitations and conditions included in that carrier's OpSpecs for each procedure to be used.
- (2) Foreign air carriers shall not normally be authorized special Category III operations to minima lower than those specified in part 97 Category III SIAPS consistent with ICAO criteria. If special instrument approach procedures other than those specified in part 97 are authorized, paragraph C081 shall also be issued.
- F. Type of CAT III Operation. The type of CAT III landing system and rollout control system (fail-passive and/ or fail-operational) must be specified for each airplane type in OpSpec C060, subparagraph a. This is accomplished by selecting the type of operation from the select data screen in

OPSS. Selections available are N/A = Not applicable; FP = Fail Passive or FO = Fail Operational.

- G. DH/AH and Lowest RVR. In table 1, enter the DH/AH and Lowest authorized RVR that the State of the Operator has authorized for each airplane Make/Model/Series and type of Cat III operation.
- H. Field Length Factor Required. Runway field length factor is used in determining the required runway field length for CAT III operations and is multiplied times the runway field length required by State of the Operator performance regulations or ICAO Annex 6 performance requirements, whichever are more restrictive.
- (1) OpSpec C060 subparagraph a must specify the runway field length required for the various kinds of CAT III operations for each airplane. For operations with a controlling runway visual range at or above 600 feet the required field length is 1.15 times the field length required by the previously cited regulations, or AFM as appropriate.
- (2) For a precision instrument approach and landing with a controlling runway visual range below 600 feet, the required field length is either 1.15 or 1.3 times the field length required by the previously cited regulations depending on the operational procedures and/or additional equipment the operator uses, or AFM as appropriate.
- I. Special Operational Equipment and Limitations. OpSpec C060 subparagraph a Table 1 should not list equipment that the airplane certification regulations (14 CFR parts 23 and 25 or foreign equivalent if foreign registered), the operating regulations of 14 CFR, and/or the approved AFM explicitly require. The "Special Operational Equipment and Limitations" column is provided for equipment that is in addition to that required by regulation and not included in the AFM. For example, additional equipment may be required if a field length factor of 1.15 is used in operations below RVR 600 where a procedural means alone is not acceptable (see AC 120-28D). For foreign carriers that have CAT III approval, copy the airplane m/m/s, type operation (e.g., FP or FO), the DH/AH, and lowest authorized RVR for each operation into Table 1. Determine the field length factor as described above (e.g., 1.3 or 1.15) and copy special operational equipment and limitations noted in the air carrier's current OpSpec C060, if any, and insert that information into Table 1 of the new OpSpec. If the operator does not need special operational equipment, put N/A under the appropriate column. Do not delete or leave any cells blank.

NOTE: Only include that equipment which is NOT explicitly required by the regulations and/or the Airplane Flight Manual.

- J. Authorized Cat III Airports and runways.
- (1) All airports and runways to which an foreign air carrier is authorized to conduct CAT III instrument approach

and landing operations need to be entered in Table 2, along with any required limitations.

(2) Category II/III Status Lists. The lists contain information concerning U.S. airports/runways approved for Category II (CAT II) and Category III (CAT III) Instrument Landing System (ILS) operations and is available on the web at: http://www.faa.gov/avr/afs/afs410/catbbs.cfm. The CAT II/III status list will be published semi-annually on January 31 and July 31. The CAT III lists in Section 3, 4, and 7 replace the information in appendix 4 of FAA Order 8400.8, Procedures for the approval of facilities for part 121 and part 135 CAT III Operations, which is being revised.

OPSPEC C063 – RESERVED FOR FUTURE USE.

OPSPEC C064 - TERMINAL AREA IFR OPERATIONS IN CLASS G AIRSPACE AND AT AIRPORTS WITHOUT AN OPERATING CONTROL TOWER - NONSCHEDULED PASSENGER AND ALL-CARGO OPERATIONS (OPTIONAL).

- A. Standard OpSpec B031 prohibits IFR airplane operations in Class G airspace and airplane operations at airports without an operating control tower, unless other OpSpecs are issued. OpSpec C064 authorizes a foreign air carrier to conduct nonscheduled passenger and all-cargo (scheduled and nonscheduled) terminal area IFR airplane operations in Class G airspace or into airports without an operating control tower, with the following limitations and provisions:
- B. Before authorizing OpSpec C064, the POI must determine that the foreign air carrier's Civil Aviation Authority (CAA) has authorized/approved it for these types of operations and that the air carrier has a method or procedure for obtaining and disseminating necessary operational information. This operational information must include the following:
- (1) That the airport is served by an authorized instrument approach procedure (and departure procedure when applicable).
 - (2) Applicable charts for crewmember use.
- (3) Operational weather data from an approved source for control of flight movements and crewmember use.
- (4) Status of airport services and facilities at the time of the operation.
- (5) Suitable means for pilots to obtain traffic advisories.
 - (6) Sources of Traffic and Airport Advisories.
- C. Foreign air carriers may be authorized to use any twoway radio source of air traffic advisory information listed in the AIM (for operations in U.S. airspace) or equivalent

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aeronautical information publications.

- (1) These sources include common traffic advisory frequencies, UNICOM, MULTICOM, and flight service stations.
- (2) In those cases where two sources are listed at the same airport, inspectors must ensure the carrier's manuals have procedures that require pilots to continuously monitor and use the traffic advisory frequency when operating within 10 nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 miles from the airport.
- (3) At some airports no public use frequencies may be available. In those cases, a certificate holder must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who operate a company radio for airport status and traffic advisory must be able to view airspace around the airport.
- D. Before the POI issues OpSpec C064, the foreign air carrier must provide documentation to the POI showing that it has the required methods or procedures and arrangements in place for obtaining and disseminating necessary operational information and that its CAA accepted/approved the procedures. In order to issue OpSpec C081, Special Non-14 CFR part 97 Instrument Approach or Departure Procedures, which authorizes the use of special (non-part 97) instrument approach or departure procedures, the FAA may need to issue OpSpecs C064 and/or C080 to the foreign air carrier.

NOTE: Presently, although developed, C081 is not authorized for foreign carriers (see OpSpec C081).

OPSPEC C065 - POWERBACK OPERATIONS WITH AIRPLANES (OPTIONAL). OpSpec C065 authorizes the use of powerplant reversing systems for rearward taxi operations. Before issuing OpSpec C065, the foreign air carrier must provide documentation to enable the POI to determine whether the carrier has established procedures for powerback operations that its CAA has accepted/approved. Airplane types (make/model/series) authorized for powerback operations must be listed in OpSpec C065. Airports where powerback operations are authorized must also be listed. If the POI and/or foreign air carrier determine that restrictions to powerback operations are required at certain gates or ramp areas, the restrictions must be described (adjacent to the airport name) in the "Restrictions and Limitations" column.

OPSPEC C067 - SPECIAL AUTHORIZATIONS, PROVISIONS, AND LIMITATIONS FOR CERTAIN AIRPORTS (REQUIRED FOR ALL FOREIGN AIR

CARRIERS).

- A. General. OpSpec C067 authorizes and limits the foreign air carrier's operation of airplanes into certain airports. These authorizations and limitations include the following types of operations:
- (1) Foreign air carriers conducting certain passenger-carrying operations into uncertificated airports (see C. below),
- (2) Foreign air carriers conducting operations at airports that require curfew limitations for flights into or out of specific airports (see D. below),
- (3) Foreign air carriers conducting operations into airports that because of <u>operational</u> considerations may require special aircraft performance charts and equipment, special lighting (i.e., flare pots, etc.), or unpaved runways, (See D. below)
- (4) Foreign air carriers conducting operations using the Reginald Bennett International Runway Reflectorization System in Alaska (see D. (2) below)
 - B. Authorizations Where Other OpSpecs are Applicable.
- (1) OpSpec C050 for "special PIC qualification airports" is applicable for the airport if contained on the <u>List of Special PIC Qualifications Airports</u>, FAA Web at <u>www.OpSpecs.com</u>. DO NOT LIST THOSE AIRPORTS IN OPSPEC C067 UNLESS ONE OF THE ITEMS IN SUBPARAGRAPH A ABOVE ALSO APPLIES.
- (2) Use OpSpec C081 for listing the airports/runways where AFS-400 has approved specific "Special" instrument procedures for a foreign air carrier.
- (3) OpSpec C064 and C080 are applicable for authorizing a foreign air carrier to conduct airplane operations in airport terminal areas in Class G airspace or at airports without an operating control tower.
- (4) OpSpec C070 is applicable for authorizing airports where foreign air carriers conduct scheduled airplane operations.
- C. Uncertificated Airports. Title 49 of the United States Code (49 U.S.C.) 44706, and 14 CFR part 121, section 121.590 impose restrictions on U.S. carriers operating certain types of passenger carrying operations into U.S. land airports that are not certified under 14 CFR part 139 and allow for authorization for such operations by the FAA. OpSpec C067 Imposes the same restrictions for foreign air carriers operating to U.S. land airports under 14 CFR part 129 and makes allowances for certain authorizations.
- (1) Limitations on the use of uncertificated U.S. land airports by passenger carrying airplanes in OpSpec

C067 are designed to mirror the requirements of Section 121.590.

- (2) In accordance with the requirements of OpSpec C067, a foreign air carrier may be authorized to conduct passenger-carrying airplane operations into an airport (military and non-military) operated by the U.S. Government that is not certificated under part 139 if those airports to be used meet:
- (a) The equivalent safety standards for airports certificated under part 139, and
- (b) The equivalent airport classification requirements under part 139 to serve the type airplanes to be operated and the type of operations to be conducted.
- (3) Inspectors may grant authorization to serve such airports by entering the location/identifier of each airport, and the M/M/S of the airplanes to be operated in Table 1, provided the State of the Operator CAA has also approved/accepted the operation:
- (a) Operators should obtain permission from the airport manager of non-military airports and the Base Commander of military airports to operate at these airports before starting operations.
- (b) This permission is not needed for operations at joint-use civil and military airports.

D. Other Special Authorizations.

- (1) Other special authorizations, limitations, and provisions include those operations that would require special operational considerations and special flight crewmember training if operations were conducted by a U.S. carrier. (See guidance in Order 8400.10, volume 4, chapter 3, section 5, paragraph 1029.) Each of these operations must also be approved/accepted by the State of the Operator CAA. These may include but are not limited to:
- (a) Operations into airports with special runway markings, such as flare pots or trees;
- (b) High altitude airports with special airplane performance requirements;
- (c) Airports with unpaved runways or runways constructed on frozen lakes and rivers.
- (2) Special authorization for conducting operations at airports in Alaska. For authorization to conduct airplane operations using the Reginald Bennett International (RBI) Runway Reflectorization System in Alaska:
- (a) The air carrier must provide a station agent at the airport trained to give wind information to the flightcrew, and

(b) The air carrier must train its flightcrews on this specific system in accordance with an approved training program. The training program must be approved in accordance with the following criteria:

- i. Each pilot must receive initial and recurrent training in accordance with their company's training program approved by the State of the Operator's CAA.
- ii. Each person must complete initial training (both ground and flight personnel) prior to his or her participation with this authorization.
- iii. Recurrent training must be completed within each subsequent 12 calendar months.
- iv. Whenever a person who is required to take this recurrent training completes the training in the calendar month before or the calendar month after the month in which this recurrent training is required, that person is considered to have completed it in the calendar month in which it was required.
- (c) The sample Table 1, below, shows how to provide authorization for conducting operations after curfew hours at specific airports or use of the RBI Runway Reflectorization system at specific airports in Table 1 of OpSpec C067.
- (3) Foreign air carrier turbojet operations on unpaved runways. Airports with unpaved runways shall be required to have special operational procedures and flight crewmember training approved/accepted as appropriate by the State of the Operator CAA. For authorization of operations at an airport with unpaved runways the POI must identify the airport and reference the appropriate section of the foreign air carrier's manuals in Table 1 of OpSpec C067.
- (4) Foreign air carrier operations to U.S. airports that <u>do not have an available alternate</u> in accordance with Annex 6, Part I, 4.3.4.3 (b) that are dispatched in accordance with the required fuel reserves set forth in Annex 6, Part I, 4.3.6.3.2 (b), shall be listed along with any special provisions or limitations, including those imposed by the foreign CAA.
- (5) Although the FAA does not encourage operators to list in their OpSpecs aircraft limitations at certain airports during curfew hours, if an airport authority requires operators to list these limitations in their OpSpecs, then operators may list them in Table 1 of OpSpec C067. A sample of Table 1 below shows an example of limitations for air carrier operations into specific airports during curfew hours.

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Airport Location/Identifier	Aircraft M/M/S (enter N/A if not applicable)	Special Provisions and Limitations and Special Flight Crewmember
		Training
PKEK, Ekwok, Alaska	N/A	A station agent is required to give
		wind information to the flightcrews
		and the flightcrew must have
		completed the required approved
		training on the RBI Runway
		Reflectorization System
DCA, Ronald Reagan Washington	Boeing 737-800	Limitations during the curfew hours
National Airport		Boeing 737-800—Max Takeoff -
		159,000 pounds
		Max Landing – 137, 600 pounds

Figure 2.6.2.7. Sample of Table 1 Airports and Special Provisions

OPSPEC C068 - NOISE ABATEMENT DEPARTURE PROFILES (NADP) (OPTIONAL).

- A. OpSpec C068 authorizes foreign air carriers to conduct NADP operations in accordance with the provisions of OpSpec C068 and the procedures in the foreign air carrier's manuals which its CAA has accepted/approved. The foreign air carrier shall use the approved NADPs for its turbojet airplanes, having a maximum certificated takeoff gross weight of more than 75,000 pounds, operating from a noise sensitive airport within the United States. The foreign air carrier shall conduct each NADP in accordance with the restrictions and limitations specified in OpSpec C068 and shall not conduct any other noise abatement departure profile operations.
- (1) For the purpose of these operations specifications, the NADPs for any airplane type at any one time shall be limited to a maximum of two profiles:
 - Close-In NADP operations; and/or
 - Distant NADP operations.
- (2) Only one NADP can be designated for each runway at each airport. The foreign air carrier's NADPs must meet the following criteria:
- (a) For Each NADP, the foreign air carrier shall specify the altitude above the field elevation (AFE) at which flirghtcrews will initiate thrust reduction from takeoff thrust (Close-In Profile) or airplane configuration change (Distant Profile), excluding gear retraction.
- (b) Close-In NADP. The foreign air carrier shall use the following NADP criteria for individual airplane types intended to provide noise reduction for noise sensitive areas located in close proximity to the departure end of the runway:
- i. Initiate thrust cutback at an altitude of no less than 800 feet AFE and prior to initiation of flaps or slats retraction.

- ii. The thrust cutback may be made by manual throttle reduction or by approved automatic means. Flightcrews may arm the automatic means before takeoff for cutback at or above 800 feet AFE or may be pilot initiated at or above 800 feet AFE.
- iii. For airplanes <u>without</u> an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps/slats configuration of the airplane, the takeoff path engine-inoperative climb gradients specified in 14 CFR part 25, section 25.111(c)(3) in the event of an engine failure.
- iv. For airplanes with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps/slats configuration of the airplane, a takeoff path engine-inoperative climb gradient of zero percent, provided that the automatic thrust restoration system will, at a minimum, restore sufficient thrust to maintain the takeoff path engine-inoperative climb gradients that Section 25.111(c)(3) specifies in the event of an engine failure.
- v. During the thrust reduction, coordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay to no more than 5 knots below the all-engine target climb speed, and in no case to less than V_2 for the airplane configuration. For automated throttle systems, acceptable speed tolerances can be found in AC 25-15, Approval of Flight Management Systems in Transport Category Airplanes.
- vi. Maintain the speed and thrust criteria as described in steps b(iii) through b(v) to 3,000 feet AFE or above, or until the airplane has been fully transitioned to the en-route climb configuration (whichever occurs first), then transition to normal en-route climb procedures.

- (c) Distant NADP. The foreign air carrier shall use the following NADP criteria for individual airplane types intended to provide noise reduction for all other noise sensitive areas.
- i. Initiate flaps/slats retraction prior to thrust cutback initiation. Flightcrews should initiate thrust cutback at an altitude no less than 800 feet AFE.
- ii. Flightcrews may make the thrust cutback by manual throttle reduction or by approved automatic means. Flightcrews may arm the automatic means prior to takeoff for cutback at or above 800 feet AFE or the flightcrew may initiate it at or above 800 feet AFE.
- iii. For airplanes without an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps/slats configuration of the airplane, the takeoff path engine-inoperative climb gradients specified in Section 25.111(c)(3) in the event of an engine failure.
- iv. For airplanes with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary after thrust reduction to maintain, for the flaps/slats configuration of the airplane, a takeoff path engine-inoperative climb gradient of zero percent, provided that the automatic thrust restoration system will, at a minimum, restore sufficient thrust to maintain the takeoff path engine-inoperative climb gradients specified in Section 25.111(c)(3) in the event of an engine failure.
- v. During the thrust reduction, coordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay to no more than 5 knots below the all-engine target climb speed, and in no case to less than V_2 for the airplane configuration. For automatic throttle systems, acceptable speed tolerances can be found in AC 25-15, Approval of Flight Management Systems in Transport Category Airplanes.
- vi. Maintain the speed and thrust criteria as described in steps (c)(iii) through (c)(v) to 3,000 feet AFE or above, or until the airplane has been fully transitioned to the en route climb configuration (whichever occurs first), then transition to normal en route climb procedures.
- B. Before authorizing this paragraph, the POI must ensure that all airplane vertical departure profiles described in the certificate holder operations and/or training manuals comply with the above criteria before authorizing OpSpec C068 for the foreign air carrier.
 - NOTE: Configuration changes necessary to meet regulatory performance or operations requirements shall not be affected by this procedure. For those airplanes that have a performance requirement to reduce takeoff flaps to an intermediate takeoff flap setting at 400 feet AFE or above, the next flap/slats retraction should be initiated at an altitude of no

less than 800 feet AFE.

OPSPEC C069 – RESERVED FOR FUTURE USE.

OPSPEC C070 - AIRPORTS AUTHORIZED FOR SCHEDULED AIRPLANE OPERATIONS (REQUIRED FOR ALL IFR OR VFR SCHEDULED AIRPLANE OPERATIONS).

- A. OpSpec C070 enables principal inspectors to adequately perform necessary surveillance on foreign air carrier operations in the United States. Inspectors need to determine whether the foreign air carrier has the necessary facilities/procedures in place, such as communications, maintenance, ground de-icing, airport analysis, etc. for the airports involved and verify necessary approvals from the foreign air carrier's CAA. All airports in the United States to which the foreign air carrier conducts International Air Service (Scheduled Operations) with airplanes, shall be listed in OpSpecs C070. This listing of airports must include:
 - (1) Destination airport name.
 - (2) Alternate and refueling airport names.
 - (3) Four letter ICAO identifier of the airports.
 - (4) Airplanes authorized to use the airports.
- (5) A notation as to whether the airport is a regular (R), refueling (F), provisional (P), or alternate (A) airport for each type of airplane authorized (Note that, except for turbojets, refueling and provisional airports are not applicable to small airplane and helicopter operators).
- (6) For each regular airport for which a provisional airport is designated, the four letter ICAO identifier of the provisional airport.
 - NOTE: If an airport is designated as provisional, the regular airport or airports for which it serves as a provisional airport must be annotated. Except in unique situations, an airport should not be designated as a provisional airport if it is located more than 100 statute miles outside of the metropolitan area served by the regular airport.
- B. The POI must select and designate each airport to be listed in OpSpec C070 as a regular (R), refueling (F), provisional (P) or alternate (A) airport for each type of airplane authorized for scheduled service. They are entered in the OPSS system under the "certificate holder-airport data" menu, and then selecting "Load Data" at the select data menu for OpSpec C070. The airplanes available for selection are only those airplanes already entered in the "certificate holder-aircraft authorization" menu, which OpSpec A003 lists. This shall be done in close coordination with the foreign air carrier. A draft should be prepared and reviewed by the carrier prior to finalizing OpSpec C070.

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Before authorizing the airports in C070 as a regular (R), refueling (F), provisional (P) or alternate (A) airport, the principal inspector must obtain documentation from the

foreign carrier showing that the requirements in the following table are met:

Figure 2.6.2.8. Airports.

Regular Airport	Alternate Airport	Provisional Airport	Refueling Airport
The airport is approved/ accepted for use by the foreign carriers CAA.	The airport is approved/ accepted for use by the foreign carriers CAA.	The airport is approved/ accepted for use by the foreign carriers CAA.	The airport is approved/ accepted for use by the foreign carriers CAA.
Appropriate DOT Economic Authority authorizing the scheduled service.			
TSA Security Program may be required in accordance with Transportation Security Act and 14 CFR section 129.25, depending on aircraft and airport.	TSA Security Program may be required in accordance with Transportation Security Act and 14 CFR section 129.25, depending on aircraft and airport.	TSA Security Program may be required in accordance with Transportation Security Act and 14 CFR section 129.25, depending on aircraft and airport.	TSA Security Program may be required in accordance with Transportation Security Act and 14 CFR section 129.25, depending on aircraft and airport.
Enplaning and Deplaning of Passengers and cargo.	May Off-Load Passengers and cargo if necessary. See note 3	May Off-Load Passengers and cargo if necessary. See note 3 and 5	No Enplaning or Deplaning of Passengers (technical stop). See note 3
Civil and Civil/Military Joint use airports –if using large aircraft as defined in paragraph A002 of Part 129 OpSpecs, must be certified under 14 CFR Part 139. See notes 1 and 2 below.	Civil and Civil/Military Joint use airports – Does not have to be certified under 14 CFR Part 139.	Civil and Civil/Military Joint use airports –if using large aircraft as defined in paragraph A002 of Part 129 OpSpecs, must be certified under 14 CFR Part 139 or military equivalent. See note 5	Civil and Civil/Military Joint use airports –if using large aircraft as defined in paragraph A002 of Part 129 OpSpecs, must be certified under 14 CFR Part 139 or military equivalent.
Military Airports -The foreign carrier must have permission from DOD to use that specific airport for the purpose listed. (Approved DD Form 2401 – Civil Aircraft Landing permit) See Note 4	Military Airports -The foreign carrier must have permission from DOD to use that specific airport for the purpose listed. (Approved DD Form 2401 – Civil Aircraft Landing permit) See Note 4	Military Airports -The foreign carrier must have permission from DOD to use that specific airport for the purpose listed. (Approved DD Form 2401 – Civil Aircraft Landing permit) See Note 4 and 5	Military Airports -The foreign carrier must have permission from DOD to use that specific airport for the purpose listed. (Approved DD Form 2401 – Civil Aircraft Landing permit) See Note 4

Notes-

1. Non-certificated Military Airports. A foreign air carrier may be authorized to conduct passenger and all-cargo operations into a military airport that is not certificated in accordance with Part 139 by issuing paragraph C067 in addition to listing the airport in C070. Operations into non-certificated military airports are restricted to those that are conducted pursuant to an exclusive contract with the Department of Defense (DOD). Passengers and/or cargo not being transported in accordance with the provisions of an exclusive contract with the DOD may not be carried in an airplane serving an non-certificated military airport. These operations, because of exclusive DOD contract requirements, are not subject to the 30-passenger seat restriction (large aircraft definition) as in the case of non-certificated U.S. civil airports.

- 2. Non-certificated U.S. Civil Airports. A foreign air carrier may be authorized to conduct operations into an airport that is not certificated in accordance with Part 139 (U.S. equivalent to Annex 14) with large aircraft; this authorization is restricted to all-cargo airplanes. Airplanes that have more than 30 passenger seats may not be authorized to operate into non-certificated airports. Paragraph C-067 must also be issued. non-scheduled operations.
- 3. Military Airports. Passengers and cargo may not be offloaded, except with the approval of the installation commander when there is no other reasonable alternative. Boarding new passengers and or loading new cargo is not authorized.
- 4. Military Airports. The foreign air carrier will need to apply to Department of Defense (DOD) in accordance with appropriate guidance issued by DOD. The approved purpose will be listed on DD 2401, Civil Aircraft Landing Permit issued by DOD, i.e. weather alternate, provisional etc.
- 5. Use of Provisional Airports. A Provisional airport is one in which the international agreements have been made in order for the carrier to use that airport as its "regular" airport on a "temporary" or "short-term" basis. For instance, if the regular airport is having major construction done on its runways then the carrier would use the provisional airport as its "regular" airport, and all the requirements for a "regular" airport would apply. Stations, manuals, fuel, maintenance, fire-fighting, etc. must be done just as required at the regular airport. It is not to be confused with an alternate airport. An alternate would be used in the case of weather or if an aircraft accident occurred on the runway and the runway was then unusable for a brief period of time.
- C. For those foreign air carriers authorized by their DOT economic or exemption authority to conduct charter operations in addition to scheduled operations, the POI should select the statement "Load as applicable, to insert charter operations text into paragraph" in the OPSS. Then the POI should select data "text tab" and then select "Load Data". This will insert a subparagraph c, with the following language, into OpSpec C070:

"The foreign air carrier may conduct charter operations at all U.S. airports as authorized by the carrier's U.S. Department of Transportation Permit or Exemption under Title 49 USC Section 41301 or 40109, as amended, and which the carrier has determined to be operationally suitable and in compliance with 14 CFR Section 129.13(b)."

OPSPEC C071 – C073 RESERVED FOR FUTURE USE.

OPSPEC C074 - STRAIGHT-IN CATEGORY I PRECISION APPROACH PROCEDURES AND IFR LANDING MINIMUMS - ALL U.S. AIRPORTS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

- A. OpSpec C074 authorizes the lowest straight-in CAT I precision approach procedures and IFR landing minimums. These precision approaches are also referred to as CAT I, ILS, MLS, or GLS (GPS landing system) approach procedures.
- B. The visibility requirement for medium intensity approach lighting systems (MALS) and short approach lighting systems (SALS) configurations was changed from 3/4 statute mile and 4000 RVR to 5/8 statute mile and 3000 RVR to allow credit for a full lighting system. Also, Note 1 regarding requirements for a full ILS was removed, as this

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information is covered in other FAA publications. Credit is given for autoland in subparagraph b.

- C. In subparagraph d, Limitations and Provisions for Instrument Approach Procedures at Foreign Airports, precision approaches are now referred to as "ILS, MLS, or GLS" and reference is made to the Joint Aviation Authorities (JAR-OPS-1).
- D. OpSpec C074 expands the approved equipment list to include the use of flight directors (FD) by authorized operators flying "Special Aircrew and Aircraft Authorization Required" (special CAT I) minimums. CAT I approach charts may depict two blocks of minimums: the standard and the "Special Aircrew and Aircraft Authorization Required" minimums. At selected locations, the POI should allow authorized operators to use the special minimums, provided they use an approved autopilot with automatic tracking capability (approach couple), and approved heads-up guidance system (HGS), or FD, approved for CAT I operations, on the approach.
- (1) Approval. Both air carrier and private operators may continue to use the standard CAT I minimums without alteration of current authorizations or procedures; however, operators must obtain FAA approval to use the special CAT I minimums. To obtain this approval, field offices will issue authorizations to general aviation operators by using FAA Form 7711-1, Certificate of Waiver or Authorization, and to air carrier operators by issuing OpSpecs.
- (2) Conditions of Approval. Before issuing an authorization to use special CAT I minimums, inspectors shall ensure that each operator meets the following conditions:
- (a) Aircraft and Associated Aircraft Systems. The authorized aircraft must be equipped with an approved autopilot approach coupler, HGS, or FD system that provides guidance to decision height (DH). Inspectors must establish that the approach coupler, HGS, or FD are certified for use down to an altitude of 200 feet above ground level (AGL) or lower.
- (b) Flightcrew Procedures. The flightcrew must use the automatic flight control guidance system (AFCGS), HGS, or FD to DH or to the initiation of a missed approach, unless visual references with the runway environment are established, thus allowing safe continuation to a landing. If the AFCGS, HGS, or FD malfunctions or becomes disconnected, the flightcrew may not descend below standard minimums unless the they see the runway environment.

OPSPEC C075 - CAT I IFR LANDING MINIMUMS CIRCLING APPROACHES (OPTIONAL).

A. The FAA issues OpSpec C075 to foreign air carriers who conduct circling approach maneuver operations with fixed-wing airplanes. OpSpec C075 specifies the lowest

minimums that can be used for CAT I circling approach maneuvers.

- B. For the purpose of this OpSpec authorization, any foreign air carrier issued this paragraph is authorized to conduct circle-to-land maneuvers. In any weather condition, a foreign air carrier that permits its pilots to accept a "circle to land" or a "circle to runway (runway number)" clearance from ATC conducts circle-to-land maneuvers. The term "circle-to-land maneuver" includes the maneuver that is referenced in various regulations, publications, and documents as "circle-to-land maneuver," "circling," "circling maneuver," "circle," "circling approach," and "circling approach maneuver." With regard to pilots, "conducting" a circle-to-land maneuver means to act as the pilot flying when a circle-to-land maneuver is being conducted.
- C. Aircraft operating under IFR during all circle-to-land maneuvers are required to remain clear of clouds. If a flightcrew loses visual reference to the airport while conducting a circle-to land maneuver, they must follow the missed approach procedure specified for the applicable instrument approach, unless ATC specifies an alternate missed approach procedure.
- D. Foreign air carriers may conduct circle-to land maneuvers under two separate provisions contained within OpSpec C075 subparagraph a.
- (1) Foreign air carriers whose pilots have been trained and checked for the circling maneuver in accordance with the foreign air carrier's training program, approved by their CAA, may conduct a circle-to-land maneuver:
- (a) at the published circling landing minimums for the instrument approach to be used; or
- (b) at the minimums specified in the chart in OpSpec C075, whichever is higher.
 - NOTE: Any pilot who possesses a pilot certificate restricting circling approaches to VMC conditions is not eligible to conduct circle-to-land maneuvers except as provided in sub-paragraph 2 below.
- (2) Foreign air carriers conducting circle-to land maneuvers without training and checking must use a Minimum Descent Altitude (MDA) of 1,000 feet height above airport (HAA) or the MDA of the published circling landing minimums for the instrument approach to be used, whichever is higher. Foreign air carriers that conduct a circle-to-land maneuver under this provision remain under an IFR clearance and must comply with those procedures otherwise required for circle-to-land maneuvers. The foreign air carrier may conduct a circle-to-land maneuver when:
- (a) the reported ceiling is at least 1,000 feet and the visibility is at least 3 statute miles; or

- (b) the reported weather is at least equal to the published circling landing minimums for the instrument approach to be used, whichever is higher.
- E. Before issuing OpSpec C075 authorizing circling approaches, the foreign air carrier must submit documentation showing that their crewmember training program, approved by their CAA provides the appropriate training and checking on circling approaches and that their CAA has approved circling approach maneuvers for the carrier.

OPSPEC C076 - CAT I IFR LANDING MINIMUMS CONTACT APPROACHES (OPTIONAL).

- A. The FAA issues OpSpec C076 to foreign air carriers who conduct operations with fixed-wing airplanes. OpSpec C076 specifies the lowest minimums that can be used for any contact approach
- B. The foreign air carrier shall not use any IFR Category I landing minimum lower than that prescribed by the applicable published instrument approach procedure. The IFR landing minimums prescribed in OpSpec C053 for nonprecision "other than ILS, MLS, or GLS" approaches and OpSpec C074 for precision "ILS, MLS, or GLS" approaches of these OpSpecs are the lowest CAT I minimums authorized for use at any airport. Those paragraphs must also be issued.
- C. Before the FAA can issue OpSpec C076 authorizing contact approaches, the foreign air carrier must submit documentation showing that their crewmember training program, approved by their CAA, provides the appropriate training and checking on contact approaches and that their CAA has approved contact approaches for the carrier.

OPSPEC C077 - TERMINAL FLIGHT RULES LIMITATIONS AND PROVISIONS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

- A. The FAA issues OpSpec C077 to all foreign air carriers operating turbojet and large airplanes to the United States. Except as provided within OpSpec C077, it restricts all operations to those conducted to IFR except in accordance with the provisions of 14 CFR part 93, SFAR 50-2, SFAR 71, or OpSpec B051, if issued. OpSpec C077 allows the foreign air carrier to conduct the following operations in the terminal area with the restrictions and limitations listed therein:
- (1) Terminal Arrival IFR Visual Approach or a Charted Visual Flight Procedure (CVFP)
 - (2) Terminal Arrival Visual Flight Rules (VFR).
 - (3) Terminal Departures VFR
 - (4) Terminal Departures IFR
 - B. For foreign air carrier is conducting a charted visual

flight procedure (CVFP), the weather minimums of 14 CFR part 91 prevail except that the carrier shall not use minimums lower than those established in the CVFP.

- C. OpSpec C077 Subparagraph b(2)(b) Uncontrolled airports. Uncontrolled airports may be in Class G airspace. In order for the foreign air carrier to exercise this provision, OpSpecs C064 and/or C080 must also be issued allowing operation at airports without an operating control tower and/or operation in Class G airspace.
- D. OpSpec C077 Subparagraph b(3). In lieu of a CVFP, a charted visual procedure that the air carrier's CAA approved is highly recommended for all terminal VFR departures/arrivals that fall under this OpSpec. The proximity of obstacles to the departure flight path, the seeing conditions, the accuracy of the guidance and control systems, the pilot's proficiency, and the foreign air carrier's training should determine the size of the area in which obstacle clearance or avoidance must be considered.
- E. OpSpec C077Subparagraph c(3). This subparagraph contains a requirement to obtain an IFR clearance no farther than 50 nautical miles from the departure airport. However, it is recognized that this procedure may not be practical in all situations. If a greater distance is necessary, the foreign air carrier may apply for a nonstandard paragraph. If OpSpec B051 is issued for VFR en route operations, then for propeller driven aircraft, except for certain en route VFR provisions in part 93, SFAR 50-2, or SFAR 71, the flight-crew may depart VFR under the provision of OpSpec C077 subparagraph c, and the requirement to obtain an IFR clearance en route does not apply.
- F. Terminal Departure IFR Requirements in subparagraph d.If ATC clears the flight, it is acceptable to execute a VMC takeoff and climb to a specified point in the clearance as part of an IFR clearance. However, the foreign air carrier must ensure that the obstacle performance requirements are met. Further, the flight must not depart on a VFR flight plan if the capability to go on an IFR flight plan is evident.
- G. Subparagraph e provides special limitations and provisions for all VFR operations. This subparagraph is applicable to all the provisions and limitations of OpSpec C077.
- (1) Subparagraph e(1). In order for the foreign air carrier to conduct VFR operations under OpSpec C077, they must have in place either a procedure or program that can identify obstacles and the airport obstacle data. Further, they must ensure that the flightcrew use that information. The POI shall request documentation from the foreign air carrier that this program is in place and that the air carrier's CAA has approved VFR terminal operations.
- (2) OpSpec C077, Subparagraph e(2). Although each subparagraph has specific details and minimums regarding VFR, the requirement for sufficient seeing condi-

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tions to identify and avoid obstacles is required for all VFR operations.

OPSPEC C078 - RESERVED FOR FUTURE USE.

OPSPEC C080 - TERMINAL AREA IFR OPERATIONS IN CLASS G AIRSPACE AND AT AIRPORTS WITHOUT AN OPERATING CONTROL TOWER FOR SCHEDULED PASSENGER OPERATIONS (OPTIONAL). Standard OpSpec B031, which is always issued, prohibits IFR airplane operations in Class G airspace, and airplane operations at airports without an operating control tower unless other OpSpecs are issued. The FAA issues OpSpec C080 to authorize a foreign air carrier to conduct terminal area airplane IFR operations for scheduled passenger operations in Class G airspace or at airports without an operating control tower.

- A. Before authorizing OpSpec C080, the POI must determine that the foreign air carrier's CAA has authorized/approved it for these types of operations. The POI must obtain and list the following information in OpSpec C080:
 - (1) Names of airports.
- (2) Sources of weather information that flightcrews will use (see Order 8400.10, volume 3, chapter 7, section 3, and Order 8700.1, volume 2, chapter 76).
 - (3) Source of traffic and airport advisories.
- B. Sources of Traffic and Airport Advisories. Foreign air carriers may be authorized to use any two-way radio source of air traffic advisory information listed in the AIM (for operations in U.S. airspace) or equivalent aeronautical information publications.
- (1) These sources include common traffic advisory frequencies, UNICOM, MULTICOM, and flight service stations.
- (2) If an air traffic advisory source is also suitable for determining the status of airport services and facilities, it is the only source that needs to be listed in Opspec C080.
- (3) When airport services and facilities information is on a different frequency, both sources should be listed in OpSpec C080.
- (4) In those cases where two sources are listed at the same airport, inspectors must ensure the foreign air carrier's manuals have procedures that require pilots to continuously monitor and use the traffic advisory frequency when operating within 10 nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 nautical miles from the airport.
- (5) At some airports no public use frequencies may be available. In those cases, a foreign air carrier must arrange for radio communication of essential information

including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who provide airport status and traffic advisory reports using a company radio must be able to view airspace around the airport.

C. Before the FAA issues OpSpec C080, the foreign air carrier must provide documentation to the POI showing that they have the required methods or procedures and arrangements in place for obtaining and disseminating necessary operational information and that their CAA has accepted/approved them. The FAA may need to issue OpSpec C080 to the foreign air carrier authorized scheduled passenger operations in order to issue OpSpec C081, Special Non 14 CFR Part 97 Instrument Approach or Departure Procedures.

OPSPEC C081 - SPECIAL NON-14 CFR PART 97 INSTRUMENT APPROACH OR DEPARTURE PROCEDURES (OPTIONAL). OpSpec C081 authorizes special non part 97 instrument approach or departure procedures. Although this OpSpec has been prepared for future use and is available in OPSS, it is presently not applicable to part 129. Non-part 97 instrument approach or departure procedures are presently not covered by the U.S. NOTAM system and no system is in place for foreign carriers to obtain necessary operational status etc. Proposed inclusion in the NOTAM system is planned for the near future. For current information on issuing Special Terminal Instrument Procedures to foreign carriers, contact AFS-50.

OPSPEC C083 - SPECIAL RESTRICTIONS TO CITY PAIRS, FREQUENCY OF OPERATION, AIRCRAFT AND SPECIAL AUTHORIZATIONS FOR OPERATIONS TO THE U.S. (REQUIRED FOR ALL CARRIERS FROM IASA CATEGORY II COUNTRIES).

A. OpSpec C083 shall be issued to any foreign air carrier conducting operations to the U.S. under 14 CFR part 129, when the FAA determines under the International Aviation Safety Assessment (IASA) program that the State of the Operator does not oversee civil aviation safety in accordance with minimum international standards. Such countries are placed in IASA Category 2. Foreign air carriers with existing operations to the United States will be permitted to continue operations at current levels under heightened FAA surveillance. The FAA does not permit expansion or changes in services to the United States by such carriers while their home country is in Category 2 status. The FAA will permit New services only if operated using aircraft wet-leased from a duly authorized and properly supervised U.S. carrier or a foreign air carrier from a Category 1 country that is authorized to serve the United States using its own aircraft under part 129. Those operations are not restricted by this OpSpec. Issuance of OpSpec C083 shall be coordinated with the International Programs and Policy Division, AFS-50. If no operations were conducted to the United States in the six calendar

months prior to month in which their home country was determined to be Category 2, the responsible IFO should begin the process of withdrawing the carriers 129 OpSpecs instead of issuing this paragraph. That process should only begin after consultation with AFS-50.

- B. Scheduled Operations. In order to maintain operations at current levels for these carriers, each foreign airport from which the foreign air carrier provides scheduled service to the United States and each U.S. airport listed in OpSpec C070 shall be listed in OpSpec C083 subparagraph A. The foreign carrier must have provided scheduled service to the listed city pairs either at the time their home country was determined to be Category 2, or during the six calendar months prior to the month their home country was determined to be Category 2. The foreign carrier shall also be limited to the frequency operated to those city pairs during the six calendar months prior to the Category 2 determination. OpSpec C083 limits the foreign air carrier's scheduled operations to the Unites States to those city pairs and frequency. If the carrier's home country once again obtains IASA Category 1 status, this OpSpec will be withdrawn.
- C. Non-Scheduled Operations. When a foreign carrier's home country is determined to be in IASA Category 2, the FAA restricts the foreign carrier's nonscheduled operations to the geographic areas to which operations were conducted and frequency of operation during the six calendar months prior to the Category 2 determination. Each U.S. geographic area to which the foreign air carrier provides nonscheduled service to the United States and the frequency of that nonscheduled service over the preceding six months shall be listed in the table in subparagraph B. If the carrier's home country once again obtains IASA Category 1 status, this OpSpec will be withdrawn. The applicable geographic areas are only those that also are listed in OpSpec B050. To list the areas of geographic authorization, accomplish the following:

- (1) First, obtain the "list of areas of en route operation." The OPSS guidance subsystem contains detailed information on geographical areas. The areas authorized for issuance to a foreign air carrier in 129 OpSpecs are:
 - USA The 48 contiguous United States and the District of Columbia
 - USA The State of Alaska
 - USA The State of Alaska; the following islands [insert]
 - USA The State of Hawaii
 - USA The State of Hawaii; the following islands [insert]
 - USA The States of [insert]
 - USA The Territory of [insert]
- (2) Then select the individual areas of en route operations to be authorized.
- (a) Certain selections have blank spaces, which when selected must be completed. These selections should normally be used only when the operation is to be limited to certain states, or islands within a larger geographic area. For example, a foreign air carrier may have its nonscheduled operations limited to Hawaii and other specific island(s) and territories(s) within the region of the South Pacific ocean, such as Guam, Samoa, if that carrier provided nonscheduled service to the area during the prior 6 months. While these types of selections provide two or three blank spaces, as many states or islands as appropriate can be entered.
- (b) If the standard phraseology for a particular selection is not appropriate, the POI may develop an appropriate description of the area to be authorized. In these cases, the POI can delete the standard phraseology and insert the nonstandard description of the geographic area.

Figure 2.6.2.9. Example Listing of Restrictions for a Foreign Air Carrier.

A. Scheduled Operations. The foreign air carrier shall only conduct scheduled operations to and from the United States between the specific city pairs listed in this paragraph.

United States City	Foreign Country City	Frequency
PANC Anchorage Alaska	XXXX anywhere city	Twice per Week

B. Non Scheduled Operations. The foreign air carrier's nonscheduled operations to and from the United States is restricted to the U.S. geographic area and frequency listed in this paragraph.

United States Geographic Area	Frequency
USA – The 48 contiguous United States and the	6 flights per year
District of Columbia	

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D. Additional Aircraft. On or after the date their home country was determined to be Category 2, no additional aircraft (including substitution of aircraft) may be added to the carrier's OpSpecs, except through the issuance of OpSpec A028, Aircraft Wet Lease Arrangements, allowing aircraft wet-leased from a duly authorized and properly supervised U.S. carrier or foreign air carrier from a category 1 country that is authorized to serve the United States using its own aircraft.

E. Special Authorizations. On or after the date their home country was determined to be Category 2, no additional special authorizations such as CATII/III, ILS/PRM, LAHSO, RVSM etc. that require approval, acceptance or authorization by the foreign carriers Civil Aviation Authority (CAA), shall be authorized in these OpSpecs, unless such authorizations are necessary in the interest of safety, and shall be issued only with the concurrence, in writing, of the International Programs and Policy Division, AFS-50. Any existing special authorizations such as CATII/ III, ILS/PRM, LAHSO, RVSM etc. that require an initial approval, acceptance, or authorization and continuing oversight by the foreign carrier's CAA, shall be reviewed to determine that adequate oversight by the foreign carrier's CAA is occurring on a continuous basis. If it is determined that such adequate oversight by the foreign carrier's CAA is not occurring on a continuous basis, the responsible IFO should consider withdrawing those special authorizations from the foreign carrier's OpSpecs. That withdrawal process should be initiated only after consultation with and clearance by AFS-50.

NOTE: Additional information on the FAA's IASA program, including a country's IASA category, can be obtained on the FAA web site at: http://www.faa.gov/avr/iasa/

OPSSPEC C084 – C099 RESERVED FOR FUTURE USE.

OPSPEC C359 - SPECIAL AUTHORIZATION FOR CERTAIN CATEGORY II OPERATIONS AT SPECIFICALLY APPROVED U.S. FACILITIES.

Operations Specification (OpSpec) C359 is a special authorization for Category II (CAT II) operations to approved instrument landing system (ILS) runways which do not have touchdown zone (TDZ) and centerline lighting (CL) or CAT II approach lighting systems with sequenced flashing lights (Approach Lighting System with Sequenced Flashing Lights (ALSF)-1 & 2). (For special authorization for lower-than-standard CAT I operations to runway visual range (RVR) 1800, see OpSpec C074.)

A. These special authorization CAT II operations at specifically approved facilities with a single RVR reporting system are limited to a decision height (DH) of 100 feet and no lower than RVR 1600. An approved runway facility with two RVR reporting systems will be limited to DH of 100

feet and no lower than RVR 1200.

- B. These special authorization CAT II approaches labeled as "Special Aircrew and Aircraft Certification Required" cannot be authorized except in accordance with the limitations and provisions of this OpSpec and the following:
- (1) Conducted only when using an autoland system or a head-up guidance system (HGS) to touch down.
- (2) Only aircraft certified for autoland or HGS to touchdown capability are eligible for these operations. Those aircraft and equipment must be listed in Table 2 of OpSpec C059.
- (3) Should the autoland system or HGS malfunction or be disengaged during the approach, the pilot-in-command (PIC) must execute a missed approach not later than arrival at DH.
- (4) The State of the Operator must have approved these type of approaches, and pilots must be trained in the use of the autoland system or HGS, as applicable, and demonstrate proficiency in ILS approaches to minimums using this equipment on checks conducted to satisfy the State of the Operator.
- (5) The foreign air carrier must provide the FAA with evidence of approval for these type of Cat II operations (foreign OpSpecs, AOC special provisions, etc.)
- (6) The foreign air carrier must be authorized for CAT II operations and issued OpSpec C059.

C. Authorized Airports and Runways.

- (1) The approved airports and runways required to be listed in OpSpec C359 are those specific facilities that have been approved for these special authorization CAT II operations in accordance with the procedures and requirements in Order 8400.13, Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations, as amended. Once a facility has been approved and charted in accordance with part 97, it can be listed on OpSpec C359.
- (2) These special authorization CAT II operations can also be conducted at runways approved for CAT II and CAT III operations under either OpSpec C059 or C060 and need not be listed in OpSpec C359.
- (3) When lighting components, i.e., touchdown zone and runway centerline lights, that are normally required for CAT II or CAT III operations become inoperative, the operations authorized under OpSpec C359 may be conducted without having listed those airports and runways in OpSpec C359, provided all the requirements of OpSpec C359 are met.

679. PART D OPERATIONS SPECIFICATIONS -

AIRCRAFT MAINTENANCE. The FAA issues Part D OpSpecs to foreign air carriers who conduct operations within the United States under Title 14 of the Code of Federal Regulations (14 CFR) part 129 using U.S. registered aircraft. The FAA also issues Part D OpSpecs to foreign persons and operators using U.S. registered aircraft operated in common carriage solely outside the United States in accordance with 14 CFR Section 129.1(b). Paragraph 293 of this section contains additional information specific to these type operations. The FAA does not issue Part D OpSpecs to Part 129 foreign air carriers who conduct operations with only foreign registered aircraft. The following guidance gives general instructions on how to complete Part D paragraphs. Detailed instructions on the procedures for approving a maintenance program and MEL under part 129, section 129.14 are contained in the Airworthiness Inspector's Handbook 8300.10, Chapter 126 and the Air Transportation Inspectors handbook 8400.10, volume 4, chapter 4.

OPSPEC D072 – AIRCRAFT MAINTENANCE – APPROVAL OF AIRCRAFT MAINTENANCE PROGRAM FOR – U.S. REGISTERED AIRCRAFT (REQUIRED FOR ALL FOREIGN AIR CARRIERS AND SECTION 129.14 OPERATORS CONDUCTING OPERATIONS WITH U.S. REGISTERED AIRCRAFT).

- A. OpSpec D072 identifies the maintenance program that the FAA has reviewed and approved for any U.S. registered aircraft as required by section 129.14. After the Principal Maintenance Inspector (PMI) has evaluated the program the operator has submitted in accordance with FAA Order 8300.10 Volume 2 chapters 126 and FAA Advisory Circular (AC) 129-4, they will need to issue OpSpec D072 as follows:
- (1) Make/Model/Series, Aircraft Registration Number and Aircraft serial number. In the OPSS for Opspec D072, select an authorized make/model/series from the carrier's/operator's aircraft authorization listing. On the Select Data screen, tables tab, click on "Load Data". The aircraft-specific information (Make/Model/Series, aircraft registration number, aircraft serial number) for the carrier's/operator's U.S. registered aircraft will be auto-filled into the table.
- (2) Maintenance Program document name, revision date and number and expiration date. On the Select Data screen, tables tab, enter the maintenance program approval document(s) name(s) and enter the program expiration date if applicable.

OPSPEC D085 – U.S. REGISTERED AIRCRAFT LISTING AND MAINTENANCE REQUIREMENTS (REQUIRED FOR ALL CARRIERS AND 129.14 OPERATORS CONDUCTING OPERATIONS WITH

U.S. REGISTERED AIRCRAFT).

- A. OpSpec D085 identifies all U.S.-registered aircraft a foreign air carrier uses when conducting operations within the United States under part 129 and/or identifies the U.S.-registered aircraft foreign persons and operators operate in common carriage solely outside the United States in accordance with part 129, section 129.1(b). Additionally, this OpSpec identifies which aircraft must comply with the requirements contained in OpSpecs parts A, B, C, and H and which do not, as well as emphasizing U.S. regulatory requirements which apply to all U.S.-registered aircraft.
- B. All aircraft information must be first entered into the OPSS system under the *Certificate Holder, Aircraft Authorization* Menu and then loaded into OpSpec D085 in *Select Data*.
- (1) U.S.-registered Aircraft Operating to the United States. When entering an authorized aircraft registration number, aircraft serial number, and make/model/series into OpSpec D085, select it from the carrier's/operator's aircraft authorization listing in the OPSS. On the Select Data screen, tables tab, click on "Load Data". The aircraft-specific information (M/M/S, A/C registration number, aircraft serial number) for the carrier's/operator's U.S.-registered aircraft will be auto-filled into the table. Then edit the table to show only those aircraft operating within the United States.
- (2) U.S.-registered Aircraft Not Operating to the United States. When entering an authorized aircraft registration number, aircraft serial number, and make/model/series into D085, select it from the carrier's/operator's aircraft authorization listing in the OPSS. On the Select Data screen, tables tab, click on "Load Data". The aircraft-specific information (M/M/S, A/C registration number, aircraft serial number) for the carrier's/operator's U.S. registered aircraft will be auto-filled into the table. Then edit the table to show only those aircraft **not** operating within the United States.

OPSPEC D092 - MAINTENANCE PROGRAM APPROVAL FOR U.S. REGISTERED AIRPLANES USED FOR OPERATIONS IN DESIGNATED REDUCED VERTICAL SEPARATION MINIMUM (RVSM) AIRSPACE. (OPTIONAL) (REQUIRED-ALL FOREIGN AIR CARRIERS CONDUCTING RVSM OPERATIONS WITH U.S. REGISTERED AIRCRAFT)

A. OpSpec D092 is used to identify the RVSM maintenance program that the FAA has reviewed and approved for any U.S. registered aircraft as required by part 129, section 129.14. After the Principal Maintenance Inspector (PMI) has evaluated the program submitted by the operator in accordance with FAA Order 8300.10 Volume 2 and 91-RVSM, the PMI will need to issue OpSpec D092. OpSpec D092 must be issued in conjunction with OpSpecs B046 and B050. Before issuing OpSpecs D092 the PMI and Principal Avionics Inspector (PAI) must review RVSM

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authorization guidance for OpSpec B046 and coordinate the issuance with the POI. Inspectors should complete OpSpec D092 as follows:

- (1) Make/Model/Series, Aircraft Registration Number and Aircraft serial number. When entering an authorized make/model/series into OpSpec D092, it should be selected from the carrier's/operator's aircraft authorization listing in the OPSS. On the Select Data screen, tables tab, click on "Load Data". The aircraft-specific information (Make/Model/Series, aircraft registration number, aircraft serial number) for the air carrier's/operator's U.S. registered aircraft will be auto-filled into the table.
- (2) Non RVSM Aircraft. Manually delete individual aircraft that are not RVSM compliant from the listing in the table.
- (3) Maintenance Program document name, revision date and number, and expiration date. On the Select Data screen, tables tab, enter the RVSM maintenance program approval document(s) name(s) and enter the program expiration date if applicable.

OPSPEC D095 – MINIMUM EQUIPMENT LIST AUTHORIZATION – U.S. REGISTERED AIRCRAFT (OPTIONAL; REQUIRED IF THE CARRIER/OPERATOR IS AUTHORIZED TO USE A MINIMUM EQUIPMENT LIST (MEL)).

- A. Obtaining MEL Approval. Each foreign air carrier may obtain approval for an MEL under section 129.14. In accordance with section 129.14 (b)(4), MELs are approved by a Letter of Authorization (LOA), and a copy of the letter must be carried aboard the aircraft. OpSpec D095 states in the first paragraph that "This paragraph constitutes the letter of authorization required under 14 CFR Section 129.14(b)(4) and must be carried aboard the aircraft". Therefore, the issuance of OpSpec D095 will fulfill the requirements of section 129.14(b)(4).
- B. Each foreign operator may develop its own MEL based on the Master Minimum Equipment List (MMEL) the FAA has approved for the specific aircraft type.
- C. When seeking approval of an MEL, the foreign operator must show that the procedures in its maintenance program are adequate to support the use of its MEL.
- D. A foreign operator leasing a U.S.-registered aircraft from a U.S. air carrier may opt to use an approved MEL in accordance with the U.S. air carrier's approved MEL, subject to FAA approval of each arrangement. For leased aircraft maintained under an adopted maintenance program and an adopted MEL, ensure the foreign operator is capable of meeting the maintenance and operational requirements of the lessor's MEL.
- E. After the POI has evaluated the program the operator submitted, and the POI has coordinated with the PMI and/or

PAI in accordance with FAA Order 8400.10 Volume 4, chapter 4, the principal inspectors will need to issue OpSpec D095 as follows.

- (1) Make/Model/Series, Aircraft Registration Number and Aircraft serial number. When entering an authorized make/model/series into Opspec D095, select it from the carrier's/operator's aircraft authorization listing in the OPSS. On the Select Data screen, tables tab, click on "Load Data", the aircraft specific information (M/M/S, A/C registration number, aircraft serial number) for the carrier's/operator's "N" registered aircraft will be auto-filled into the table.
- (2) MMEL revision date and number and MEL revision date and number. On the Select Data screen, tables tab, enter the MMEL and MEL revision date and number. See FAA Order 8400.10 Volume 4, chapter 4, Sections 1 and 2 for guidance.

OPSPEC D485 - AGING AIRPLANE INSPECTION AND RECORDS REVIEW (REQUIRED-ALL FOREIGN AIR CARRIERS CONDUCTING OPERATIONS WITH U.S. REGISTERED AIRPLANES)

- A. OpSpec D485, Aging Airplane and Inspection Review, is a "data collection" paragraph as indicated by the "400" series. OpSpec D485 is an optional paragraph for part 129 foreign carriers, and must be issued when U.S. registered airplanes are used in the carriers operation.
 - For all foreign carriers for which paragraph D485 is issued, the assigned International Field Office (IFO) or International Field Unit (IFU) Must complete OpSpec D485, even if they do not have airplanes that require inspection.
 - The inspection review is applicable to every U.S.registered, multiengine airplane operated under part 129.
 - If inspection review is NOT applicable to a particular airplane or to all airplanes for a foreign air carrier, OpSpec D485 still must be activated in OPSS with appropriate language as to why the inspection review is not applicable (i.e., N/A, Below Threshold N/A, Storage Not Completed, Not Completed, No multi-engine airplanes).
 - Basic Requirement. The basic requirement is to inspect each aircraft and its records; however, a sampling of these tasks and records for each airplane along with routine surveillance of a foreign carrier's maintenance program will ensure each airplane and its age-sensitive components are properly maintained.
 - IFOs and IFUs may use Program Tracking and Reporting Subsystem (PTRS) to report aircraft and records inspections.

- Please refer to Notice 8300.113 for more detailed guidance on conducting records reviews and aircraft inspections mandated by the aging aircraft rules.
- B. In completing the D485 select data: the "[first 4 columns of the table] will be loaded from the Foreign Air carrier's Aircraft Authorization airplane information," as stated in the OpSpec. Aircraft Registration Number, Serial Number, Nose Number and Make/Model/Series data for BOTH OpSpec D085 and OpSpec D485 are loaded into those OpSpecs from aircraft information entered under the Certificate Holder Menu, Aircraft Authorization in OPSS.
- C. Theoretically, the Foreign Air Carrier's Aircraft Authorization and OpSpec D085 airplanes should be one and the same; that is, the information entered under the Certificate Holder drop-down menu under Aircraft Authorization is what should be loaded into the OpSpec D085 (and OpSpec D485).
 - Updates to the operator aircraft inventory should be made only in Aircraft Authorization and then loaded into the OpSpecs D085 and D485.

689. PART H - HELICOPTER TERMINAL INSTRUMENT PROCEDURES AND AIRPORT AUTHORIZATIONS AND LIMITATIONS. The FAA issues Part H to each foreign air carrier who conducts part 129 instrument flight rules (IFR) operations with helicopters. It is not issued to part 129 foreign air carriers who conduct only fixed-wing airplane operations. Part H is not usually issued to foreign air carriers conducting on-demand helicopter operations who are restricted to visual flight rules (VFR)-only operations. In rare situations, the FAA issues OpSpec H120 to part 129 VFR-only foreign air carriers who are authorized to conduct scheduled operations with helicopters.

OPSPEC H101 - TERMINAL INSTRUMENT PROCEDURES (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

- A. Opspec H101 shall be issued to all foreign air carriers who conduct any flight operations under IFR with helicopters, and provides direction and guidance on acceptance of U.S. terminal instrument procedures. The paragraph also provides additional guidance to the foreign air carrier for converting any takeoff and landing minimum expressed in the metric linear measurement system to the U.S. standard linear measurement system.
- B. This paragraph requires no inspector input. Additional information concerning terminal instrument procedures is in Order 8400.10, volume 4, chapter 2.

OPSPEC H102 - BASIC INSTRUMENT APPROACH PROCEDURE AUTHORIZATIONS-- ALL AIRPORTS - HELICOPTERS (REQUIRED FOR ALL CARRIERS

CONDUCTING IFR OPERATIONS).

- A. OpSpec H102 specifies the types of instrument approaches the foreign air carrier is authorized to conduct and prohibits the use of other types of instrument approaches. Before authorizing a type of instrument approach procedure, the POI must ensure that the foreign air carrier has established the aircraft system eligibility and that its manual, which the State of the Operator must have approved/accepted, includes both flightcrew training and procedures, as applicable, for the types of approaches to be authorized. All the approaches authorized by OpSpec H102 must be published in accordance with part 97.
- B. Three types of instrument approach procedures may be authorized in OpSpec H102:
- (1) Column one provides for the authorization of non-precision instrument approach procedures without vertical guidance (approaches other than Instrument Landing System (ILS) and Microwave Landing System (MLS). Non-precision approaches must be conducted in accordance with approved procedures that assure descent will not go below minimum descent altitude (MDA) unless the required visual references for continuing the approach are present (reference 14 CFR Section 91.175).
- (2) Column two provides for the authorization of precision-like instrument approach procedures with vertical guidance (approaches other than ILS and MLS). These are called precision-like approaches because they provide vertical guidance but are not as accurate as true precision approaches. Foreign air carriers must conduct these precision-like approach procedures using an approved method that allows descent to a published decision altitude (DA).
- (3) Column three provides for the authorization of precision instrument approach procedures (ILS, MLS, and GLS approaches) that provide vertical guidance.
- C. Barometric Vertical Navigation (BARO-VNAV) approach operations (referred to as area navigation (RNAV) with vertical guidance) may be authorized for all applicable foreign air carriers in accordance with the guidance contained in Order 8400.10, volume 4, chapter 2, section 4, and AC 120-29A, Criteria for Approval of Category I and Category II Weather Minima for Approach.
- (1) Air Carrier Aircraft/Commercial Operator Approval. Once a foreign air carrier has established the aircraft system eligibility and the flightcrew training and checking requirements in the manual which the State of the Operator approved/accepted, as applicable, the POI may give approval to use this RNAV equipment to fly to the lateral navigation (LNAV)/VNAV DA as shown on the published Instrument Approach Procedure (IAP).

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- (2) To authorize these precision-like approaches that provide vertical guidance, select "RNAV (GPS)" for insertion into column two of OpSpec H102.
- D. Precision Radar Monitoring (PRM) Approaches. HBAT 03-03A, Approving Simultaneous Instrument Approaches to Closely-Spaced Parallel Runways: ILS/PRM and LDA/PRM, AC 90-98, Simultaneous Closely Spaced Parallel Operations Airports Using Precision Runway Monitor Systems (PRM), and the Aeronautical Information Manual (AIM) speak to PRM operations. PRM enables simultaneous operations to parallel runways spaced closer than 4,300 feet apart in instrument meteorological conditions (IMC). Foreign air carriers will be authorized PRM approaches in OpSpec H102. Definitions of ILS/PRM and Localizer-type Directional Aid (LDA)/PRM have been added to OpSpec A002. Two types of instrument approach procedures with PRM are currently in use:
- (1) LS/PRM. This operation comprises two ILSs, each aligned with its respective runway and parallel to each other. ILS/PRM permits simultaneous instrument approach operations to parallel runways spaced less than 4,300 feet apart, but not less than 3,000 feet.
- (2) LDA/PRM (Simultaneous Offset Instrument Approach (SOIA)). This operation comprises one ILS and LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (no more than 3 degrees) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as a simultaneous offset instrument approach (SOIA).
- E. Precision Radar Monitoring (PRM). The FAA began the Multiple Parallel Approach Program to research whether simultaneous ILS approaches to parallel runways would improve capacity. The objective was to achieve improvements in airport arrival rates through the conduct of simultaneous close spaces parallel approaches. That objective is being met using PRM.
- (1) ILS/PRM and LDA/PRM Approaches. Where parallel runway centerlines are 4,300 feet apart or less, but not less than 3,000 feet, simultaneous ILS approaches may be conducted. Similarly, where parallel runway centerlines are 3,000 feet apart or less, but not less than 750 feet, simultaneous offset instrument approaches (SOIA) may be conducted with ILS approaches. Those approaches are labeled "ILS/PRM" and "LDA/PRM," respectively, on instrument approach charts. Air traffic control (ATC) provides an air traffic controller using special PRM radar during these approaches. That controller is known as the final monitor controller.
- (2) The Breakout Maneuver. Working with industry, the FAA conducted extensive analysis of simulation data and determined that the implementation of PRM and SOIA

approach operations to closely spaced parallel runways requires additional crew training. The primary focus of this training is to raise each pilot's situational awareness in ILS/PRM and LDA/PRM operations. Flightcrews must fly the breakout maneuver manually.

- (a) *Traffic Alert*. One important element of the additional training is the pilot's understanding of the difference between a normal missed approach initiated by a pilot and a breakout initiated by a PRM final monitor controller. It must be clear to flightcrews that when the final monitor controller uses the words "Traffic Alert," the controller will then give critical instructions that the pilot must act on promptly to preserve adequate separation from an aircraft straying into the adjoining approach path.
- (b) ATC Breakout Maneuver Command to Turn and/or Descend, Climb, or Maintain Altitude. The flight-crew must immediately follow the final monitor controller's vertical (climb/descend/maintain altitude) and horizontal (turn) commands. If the flightcrew is operating Traffic Alert and Collision Avoidance System (TCAS) in the traffic advisory (TA)/resolution advisory (RA) mode and receives a TCAS RA at any time while following the final monitor controller's command, the flightcrew will simultaneously continue to turn to the controller's assigned heading and follow the vertical guidance provided by the TCAS RA.
- (c) Time-to-Turn Standard. Regardless o f aircraft type, tests and data analysis revealed that pilots must be able to achieve a rate of turn of 3 degrees per second within 8 seconds of receiving a breakout command. The air carrier must show that its pilots can readily meet this timeto-turn standard before the POI will authorize ILS/PRM or LDA/PRM approaches in OpSpec H102. The FAA requires flightcrews to manually fly the breakout maneuver. (AFS-400 concurrence is required to approve breakout in auto modes). The foreign air carrier should demonstrate its ability to meet this standard by having representative pilots perform the breakout maneuver while the POI or the POI's designated representative observes. The demonstration should conform to procedures contained in the air carrier's approved operating manual for its flightcrews.
 - NOTE: In a breakout, ATC will never command a descent below the applicable minimum vector altitude (MVA), thus assuring that no flight will be commanded to descend below 1,000 feet above the highest obstacle during a breakout.
- (3) ILS/PRM, LDA/PRM, and the Use of TCAS. TCAS may be operated in TA/RA mode while executing ILS/PRM or LDA/PRM approaches. However, when conducting these operations, pilots must understand that the final monitor controller's instruction to turn is the primary means for ensuring safe separation from another aircraft. Pilots must bear in mind that TCAS does not provide separation in the horizontal plane; TCAS accomplishes separation by commands solely in the vertical plane. Therefore,

during final approach only the final monitor controller has the capability to command a turn for lateral separation. Flightcrews are expected to follow any ATC instruction to turn.

- (a) ATC command to turn with TCAS RA. In the unlikely event that a flightcrew should simultaneously receive a final monitor controller's command to turn and a TCAS RA, the flightcrew must follow both the final monitor controller's turn command and the TCAS RA's climb or descent command.
- (b) TCAS RA alone. In the extremely unlikely event that an RA occurs without a concurrent breakout instruction from the final monitor controller, the pilot should follow the RA and advise the controller of the action taken as soon as possible. In this instance, it is likely that a breakout command would follow.
- (c) *TCAS not required*. An operative TCAS is not required to conduct ILS/PRM or LDA/PRM approaches.
- (4) Required and recommended training for ILS/PRM and LDA/PRM approaches. A foreign air carrier must include required training in its training program and the State of the Operator must approve that training before the FAA may authorize either or both PRM approaches in OpSpec H102. Flightcrews must accomplish required ground training before conducting ILS/PRM or LDA/PRM approaches.
 - (a) Initial ground training -- REQUIRED.
- i. This training must include all elements of the "ATTENTION TO ALL USERS" page of an ILS/PRM or an LDA/PRM as authorized, along with viewing the latest version of the PRM video. (See video at: www.faa.gov/avr/afs/prmtraining/, or contact FAA Flight Standards at (202) 267-8166 for the most current version.)

NOTE: The FAA does not require flightcrews trained previously in PRM operations under earlier guidance to re-qualify with each new version of the PRM video.

- ii. The ground portion of the training program must support the following knowledge objectives. Each flight crewmember must:
 - Describe the PRM system to include the meaning of "no transgression zones."
 - Know that an aircraft on an adjacent approach path may be less than 4,300 feet away and may be flying at a different speed.
 - Know that the automatic terminal information service (ATIS) broadcasts a pilot advisory when ILS/PRM or LDA/PRM approaches are in progress.
 - Identify the differences between ILS/PRM approach charts and normal ILS approach

- charts, including the special instruction pages for ILS/PRM.
- Explain the unique communication requirements (equipment and procedures) for ILS/ PRM and LDA/PRM approaches.
- Know that an unpublished missed approach instruction that ATC may issue prior to published missed approach points is called a "breakout."
- Know that a breakout may include instructions to descend and that the descent will be to no lower than the minimum vector altitude (MVA) for the sector. The MVA guarantees 1,000 feet above the highest obstruction in that sector. The rate of descent controllers expect is not more than 1,000 feet per minute.
- Know that a pilot must initiate a breakout maneuver manually and immediately upon hearing the "Traffic Alert" command from ATC, and that adequate separation requires that the pilot establish a 3-degree-per-second rate of turn within 8 seconds.
- Know that the three areas (ATIS, Dual VHF Comm. Required, and All "Breakouts") in the "ATTENTION TO ALL USERS PAGE" must be briefed (in flight) prior to conducting an ILS/PRM or an LDA/PRM approach.
- Know that flightcrews may operate TCAS in the TA/RA mode when conducting PRM approaches, including the following points:
 - When an RA occurs with a concurrent ATC breakout command – follow the turn required in the ATC instructions; follow the climb or descent in the RA command (split commands).
 - When an RA occurs without a concurrent ATC breakout command – follow the RA and contact ATC as soon as practical
 - TCAS provides only vertical resolution to aircraft conflicts
 - An operative TCAS is not required for PRM operations
- Know procedures for simultaneous offset instrument approaches (SOIA), including the following points:
 - A visual segment of the LDA/PRM approach is established prior to the LDA missed approach point (MAP) to permit:
 - Visual acquisition of the ILS traffic to the parallel runway and advising ATC

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- Visual acquisition of the runway environment
- LDA course is maintained until the MAP. At the MAP, the pilot must have the ILS traffic in sight and the runway environment in sight, or fly the missed approach.
- At the MAP with the ILS traffic and the runway in sight, the pilot may continue to a landing:
 - Maneuver to align with the runway centerline
 - Stabilize on glide path no lower than 500 feet above TDZ
 - Avoid wake turbulence from the ILS traffic
- iii. The FAA recommends testing of these knowledge objectives.
 - (b) Initial flight training REQUIRED:
 - · Breakout maneuver

NOTE 1:Initial breakout flight training must focus on the descending breakout.

NOTE 2:Air carriers who currently hold OpSpec approval to conduct PRM approaches have 12 months from the effective date of HBAT 03-03A to initiate breakout flight training, and must complete training by the end of the next full training cycle.

NOTE 3:Air carriers applying for initial approval to conduct PRM approaches must complete breakout flight training by the end of the next full training cycle after receiving OpSpec approval.

NOTE 4: The FAA may authorize air carriers to conduct ILS/PRM approaches, LDA/PRM approaches, or both. The FAA does not require duplicative flight training in the breakout maneuver (i.e., breakout covered in flight training for ILS/PRM is creditable toward the LDA/PRM, and vice versa).

NOTE 5:All air carriers who provide breakout training to flightcrews prior to the effective date of HBAT 03-03A are not required to requalify.

• LDA/PRM approach.

Recommended: ILS/PRM approach (if authorized on OpSpecs)

- (c) Recurrent ground training. REQUIRED:
 - Review of the ground training elements and the video in (a) above and testing in those elements.

- (d) Recurrent flight training.
 - i. REQUIRED: None.
 - ii. RECOMMENDED:
 - · ILS/PRM approach
 - · LDA/PRM approach
 - · Breakout
- (5) Authorizing ILS/PRM approaches and LDA/PRM approaches for 14 CFR part 129 foreign air carriers. A part 129 foreign air carrier operating in the United States may be authorized in OpSpec H102 to conduct ILS/PRM approaches and/or LDA/PRM approaches if:
- (a) That foreign air carrier meets the ground and flight training requirements contained in paragraphs (4)(a) through (c) above;
- (b) The Civil Aviation Authority (CAA) for the foreign air carrier authorizes these type approaches; and
- (c) The air carrier's POI determines the following:
- i. That a point of contact for the foreign air carrier's CAA has been established in the foreign air carrier's OpSpec A006(c) and
- ii. The IFO/FSDO has notified the International Programs and Policy office, AFS-50, that the foreign air carrier is authorized to conduct PRM approaches.

NOTE: AFS-50 must notify FAA Air Traffic Procedures, ATP-100, of each foreign air carrier authorized to conduct PRM approaches.

OPSPEC H103-- STRAIGHT-IN CATEGORY I NON-PRECISION APPROACH PROCEDURES - ALL AIRPORTS - HELICOPTERS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

OpSpec H103 shall be issued to all foreign air carriers conducting IFR operations with helicopters. This paragraph specifies the lowest landing minimums which can be used for Category I nonprecision approach procedures other than ILS, MLS, or GPS Landing System (GLS) at all airports To authorize Straight-In Category I ILS, MLS, or GLS Approach Procedures and IFR Landing Minimums, OpSpec H117 must be issued. The previous nonprecision approach table now refers to Category I nonprecision approaches as "approaches other than ILS, MLS, or GPS Landing System (GLS)."

OPSPEC H104--HELICOPTER EN ROUTE DESCENT AREAS (HEDA) (OPTIONAL).

A. The FAA issues OpSpec H104 to all operators authorized to conduct IFR helicopter operations using helicopter en route descent procedures within specified areas of operation. It is not issued to helicopter operators who are not authorized to use helicopter en route descent

procedures.

B. Before being authorized to conduct HEDAs, each operator who applies must have at least one helicopter equipped with the airborne radar approved for HEDA use, an IFR approved GPS or LORAN C navigation receiver, and radio altimeter. The GPS navigation equipment must meet the minimum requirements of TSO C129 with an external course deviation indicator (CDI) or Horizontal Situation Indicator (HSI) mounted in the pilot's primary instrument scan. Order 8400.10, volume 4, chapter 1, provides guidance for approval of this equipment to be used as sole means for long range navigation. The airborne radar minimum requirements are stated in paragraph 2-1 of AC 90-80B, Approval of Offshore Standard Approach Procedure (OSAP), Airborne Radar Approaches (ARA), and Helicopter En Route Areas (HEDA) Criteria. Airworthiness requirements are stated in paragraph 2-2 of AC 90-80B. Maintenance requirements are stated in paragraph 2-3 of AC 90-80B. Inspection and Test procedures are stated in paragraph 2-4 of AC 90-80B.

C. Order 8400.10, volume 4, Chapter 7, and 14 CFR part 91, subpart B, provide guidance for weather reporting requirements and preflight action. Training programs, Procedure Development Criteria, and requests for approval are stated in chapter 4 of AC 90-80B.

D. All authorized HEDAs must be listed in the OpSpecs of all operators conducting HEDA operations. The lowest altitude must be listed in table 2 and must not be lower than 400 feet RA. HEDA must also be selected as an authorized type of approach in H-102.

OPSPEC H105 - ALTERNATE AIRPORT IFR WEATHER MINIMUMS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

A. OpSpec H105 shall be issued to all foreign air carriers who conduct IFR operations with Helicopters. This paragraph provides a table from which the operator, during the initial dispatch or flight release planning segment of a flight, derives U.S. alternate airport IFR weather minimums in those cases where it has been determined that an alternate airport is required.

B. The table is for airports with at least one operational navigational facility providing a straight-in nonprecision approach procedure, or a straight-in precision approach procedure, or, when applicable, a circling maneuver from an instrument approach procedure. The required ceiling and visibility is obtained by adding 200 feet to the CAT I Height Above Touchdown (HAT) or, when applicable, the authorized Height Above Airport (HAA) and by using 1 statute mile visibility, but never less than the published minimum visibility for the approach to be flown.

OPSPEC H106 - IFR TAKEOFF MINIMUMS, HELICOPTER OPERATIONS--ALL AIRPORTS

(REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).. OpSpec H106 is issued to all part 129 operators who conduct IFR helicopter operations. Only H106 a and b will be printed for issuance when an operator is not authorized to use lower than standard takeoff minimums. OpSpec H106, subparagraphs a, b, and c will be printed for issuance when the operator is authorized to use takeoff minimums equal to the lowest straight-in landing minimums. OpSpec H116 must also be issued when the operator is authorized to use takeoff minimums lower than 1/2 mile or RVR 1800.

OPSPEC H107 - RESERVED FOR FUTURE USE.

OPSPEC H108 - CATEGORY II (CAT II) INSTRUMENT APPROACH AND LANDING OPERATIONS. (TBD)

OPSPEC H109-H112 - RESERVED FOR FUTURE USE.

OPSPEC H113--SPECIAL TERMINAL AREA IFR ROTORCRAFT OPERATIONS IN CLASS G AIRSPACE – NONSCHEDULED PASSENGER AND ALL-CARGO OPERATIONS. . Standard OpSpec B031 prohibits IFR operations in Class G airspace unless other OpSpec paragraphs are issued. OpSpec H113 authorizes a foreign air carrier to conduct nonscheduled passenger and all-cargo (scheduled and nonscheduled) terminal area IFR operations in Class G airspace, with the following limitations and provisions:

A. Before authorizing OpSpec H113, the POI must determine that the foreign air carrier's CAA has authorized/approved it for these types of operations and has a method or procedure for obtaining and disseminating necessary operational information. This operational information must include the following:

- (1) Documentation that the airport is served by an authorized instrument approach procedure (and departure procedure when applicable).
 - (2) Applicable charts for crewmember use.
- (3) Operational weather data from an approved source for control of flight movements and crewmember use.
- (4) Status of airport services and facilities at the time of the operation.
- (5) Suitable means for pilots to obtain traffic advisories.
 - (6) Sources of Traffic and Airport Advisories.
- B. Foreign air carriers may be authorized to use any twoway radio source of air traffic advisory information listed in the AIM (for operations in U.S. airspace) or equivalent

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aeronautical information publications.

- (1) These sources include common traffic advisory frequencies, UNICOM, MULTICOM, and flight service stations.
- (2) In those cases where two sources are listed at the same airport, inspectors must ensure the carrier's manuals have procedures that require pilots to continuously monitor and use the traffic advisory frequency when operating within 10 nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 miles from the airport.
- (3) At some airports no public use frequencies may be available. In those cases, a certificate holder must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who operate a company radio for airport status and traffic advisory must be able to view airspace around the airport.
- C. Before the FAA issues OpSpec H113, the foreign air carrier must provide documentation to the POI showing that it has the required methods or procedures and arrangements in place for obtaining and disseminating necessary operational information and that its CAA has accepted/approved the procedures. The FAA may need to issue OpSpecs H113 and/or H121 to the foreign air carrier in order to issue OpSpec H122, Special Non 14 CFR Part 97 Instrument Approach or Departure Procedures, which authorizes the use of special (non-part 97) instrument approach or departure procedures.

NOTE: Presently, although developed, H122 is not authorized for foreign carriers (see H122).

OPSPEC H114 - 115 RESERVED FOR FUTURE USE.

OPSPEC H116—IFR LOWER THAN STANDARD TAKEOFF MINIMUMS, HELICOPTER OPERATIONS (OPTIONAL). The FAA issues OpSpec H116 to a foreign air carrier to authorize lower than standard takeoff minimums. This OpSpec contains specific guidance regarding pilots, aircraft, and airports when lower-than-standard takeoff minimums are used. This section contains information that operations inspectors will use when issuing lower-than standard takeoff minimums for foreign air carriers operating helicopters.

- A. Training. POIs shall ensure that foreign air carriers requesting lower-than-standard takeoff minimums provide procedures and training to their personnel, which has been approved by the State of the Operator, in all areas referenced in the OpSpec. The foreign air carrier's procedures and training program must contain at least the following, as applicable:
 - Rejected takeoffs in a low visibility environment

- Engine failure in low visibility
- Taxing in a low visibility environment with emphasis on preventing runway incursion
- · Critical areas
- · Crew coordination and planning
- · Dispatcher training
- Procedures for operators not using dispatch systems
- Required ground-based visual aids (such as stop bars and taxiholding position lights)
- Required ground-based electronic aids (such as ILS/MLS transmissometers)
- Determination of takeoff alternate airports, as applicable
- B. Lower than standard takeoff minimums that foreign air carrier's exercise under these operations specifications shall not be less than those lower than standard takeoff minimums that the State of the Operator authorizes.

NOTE: POIs should be aware that there may be additional limitations and guidance for specific helicopters in Flight Standardization Board (FSB) reports.

OPSPEC H117—STRAIGHT-IN CATEGORY I PRECISION INSTRUMENT APPROACH PROCEDURES – ALL AIRPORTS (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS). OpSpec C074 authorizes the lowest straight-in Category (CAT) I precision approach procedures and IFR landing minimums. These precision approaches are also referred to as Category I, ILS, MLS, or GLS (GPS landing system) approach procedures.

- A. The visibility requirement for Medium Intensity Approach Lighting Systems (MALS) and Short Approach Lighting Systems (SALS) configurations was changed from 3/4 statute mile and 4000 RVR to 5/8 statute mile and 3000 RVR to allow credit for a full lighting system. Also Note 1 regarding requirements for a full ILS was removed, as this information is covered in other FAA publications. Credit is given for autoland in subparagraph b.
- B. In OpSpec C074, subparagraph d, Limitations and Provisions for Instrument Approach Procedures at Foreign Airports, precision approaches are now referred to as ILS, MLS, or GLS and reference is made to the Joint Aviation Authorities (JAR-OPS-1).
- C. OpSpec C074 expands the approved equipment list to include the use of flight directors (FD) by authorized operators flying "Special Aircrew and Aircraft Authorization Required" (special CAT I) minimums. CAT I approach charts may depict two blocks of minimums: the standard and the "Special Aircrew and Aircraft

Authorization Required" minimums. At selected locations, the POI should allow authorized operators to use the special minimums, provided an approved autopilot with automatic tracking capability (approach couple), and approved headsup guidance system (HGS), or FD, approved for CAT I operations, is used on the approach.

- (1) Approval. Both air carrier and private operators may continue to use the standard CAT I minimums without alteration of current authorizations or procedures; however, operators must obtain FAA approval to use the special CAT I minimums. To obtain this approval, field offices will issue authorizations to general aviation operators by using FAA Form 7711-1, Certificate of Waiver or Authorization, and to air carrier operators by issuing operations specifications.
- (2) Conditions of Approval. Before issuing an authorization to use special CAT I minimums, inspectors shall ensure that each operator meets the following conditions:
- (a) Aircraft and Associated Aircraft Systems. The authorized aircraft must be equipped with an approved autopilot approach coupler, HGS, or FD system that provides guidance to decision height (DH). Inspectors must establish that the approach coupler, HGS, or FD are certified for use down to an altitude of 200 feet above ground level (AGL) or lower.
- (b) Flightcrew Procedures. The PIC must use the automatic flight control guidance system (AFCGS), HGS, or FD to DH or to the initiation of a missed approach, unless visual references with the runway environment are established, thus allowing safe continuation to a landing. If the AFCGS, HGS, or FD malfunctions or becomes disconnected, the PIC may not descend below standard minimums unless the runway environment is in sight.

OPSPEC H118—CATEGORY 1 IFR LANDING MINIMUMS – CIRCLE-TO-LAND APPROACH MANEUVER (REQUIRED FOR ALL CARRIERS CONDUCTING IFR OPERATIONS).

- A. OpSpec H118 is issued to foreign air carriers who conduct circling approach maneuver operations with rotorcraft. OpSpec H118 specifies the lowest minimums that can be used for Category I circling approach maneuvers.
- B. For the purpose of this OpSpec authorization, any foreign air carrier issued this paragraph is authorized to conduct circle-to-land maneuvers. In any weather condition, a foreign air carrier that permits its pilots to accept a "circle to land" or a "circle to runway (runway number)" clearance from ATC conducts circle-to-land maneuvers. The term "circle-to-land maneuver" includes the maneuver that is referenced in various regulations, publications, and documents as "circle-to-land maneuver," "circling," "circling maneuver," "circle," "circling approach," and "circling approach maneuver." With regard to pilots,

"conducting" a circle-to-land maneuver means to act as the pilot flying when a circle-to-land maneuver is being conducted.

- C. Aircraft operating under IFR during all circle-to-land maneuvers are required to remain clear of clouds. If the flightcrew loses visual reference to the airport while conducting a circle-to land maneuver, they must follow the missed approach procedure specified for the applicable instrument approach, unless ATC specifies an alternate missed approach procedure.
- D. Foreign air carriers may conduct circle-to land maneuvers under two separate provisions contained within OpSpec H118 sub-paragraph a.
- (1) Foreign air carriers whose pilots have been trained and checked for the circling maneuver in accordance with the foreign air carrier's CAA-approved training program, may conduct a circle-to-land maneuver:
- (a) at the published circling landing minimums for the instrument approach to be used; or
- (b) at the minimums specified in the chart contained within the OpSpec H118, whichever is higher.

NOTE: Any pilot who possesses a pilot certificate restricting circling approaches to VMC conditions is not eligible to conduct circle-to-land maneuvers except as provided in sub-paragraph (2) below.

- (2) Foreign air carriers conducting circle-to land maneuvers without training and checking must use a Minimum Descent Altitude (MDA) of 1,000 feet HAA or the MDA of the published circling landing minimums for the instrument approach to be used, whichever is higher. Foreign air carriers that conduct a circle-to-land maneuver under this provision remain under an IFR clearance and must comply with those procedures otherwise required for circle-to-land maneuvers. The foreign air carrier may conduct a circle-to-land maneuver when:
- (a) the reported ceiling is at least 1,000 feet and the visibility is at least 3 statute miles; or
- (b) the reported weather is at least equal to the published circling landing minimums for the instrument approach to be used, whichever is higher.
- E. Before issuing OpSpec H118 authorizing circling approaches, the foreign air carrier must submit documentation showing that their crewmember training program, approved by their CAA provides the appropriate training and checking on circling approaches and that their CAA has approved circling approach maneuvers for the carrier.

OPSPEC H119 - RESERVED FOR FUTURE USE.

OPSPEC H120--AIRPORTS AUTHORIZED FOR SCHEDULED ROTORCRAFT OPERATIONS

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(REQUIRED FOR ALL IFR OR VFR SCHEDULED ROTORCRAFT OPERATIONS).

A. The purpose of OpSpec H120 is to enable principal inspectors to adequately perform necessary surveillance on foreign air carrier operations in the United States. Inspectors have a need to determine whether the foreign air carrier has the necessary facilities/procedures in place such as communications, maintenance, ground de-ice, airport analysis, etc., for the airports involved and verify necessary approvals from the foreign air carrier's CAA. All airports in the U.S. to which the foreign air carrier conducts International Air Service (Scheduled Operations) with rotorcraft, shall be listed in OpSpecs H120. This listing of airports shall include:

- (1) Destination airport name.
- (2) Alternate and refueling airport names.
- (3) Four letter ICAO identifier of the airports.
- (4) Aircraft authorized to use the airports.
- (5) A notation as to whether the airport is regular (R) or alternate (A) airport for each type of rotorcraft authorized (refueling and provisional airports are not applicable to small airplane and helicopter operators).
- B. The POI must select and designate each airport to be listed in OpSpec H120 as a regular (R) or alternate (A) airport for each type of rotorcraft authorized for scheduled service. Enter them in the OPSS system under the "certificate holder-airport data" menu, and then select "Load Data" at the select data menu for OpSpec H120. The rotorcraft available for selection are only those aircraft already entered in the "certificate holder-aircraft authorization" menu, which are listed in OpSpec A003, Aircraft Authorizations. This shall be done in close coordination with the foreign air carrier. A draft should be prepared and reviewed by the carrier prior to finalizing OpSpec H120.
- C. For those foreign carriers whose DOT economic or exemption authority authorizes them to conduct charter operations in addition to scheduled operations, the POI should select the statement "Load as applicable, to insert charter operations text into paragraph" in the OPSS select data "text tab" and then select "Load Data". This will insert a subparagraph c, with the following language into OpSpec H120:

"The foreign air carrier may conduct charter operations at all U.S. airports as authorized by the carrier's U.S. Department of Transportation Permit or Exemption under Title 49 USC Section 41301 or 40109, as amended, and which the carrier has determined to be

operationally suitable and in compliance with 14 CFR Section 129.13(b)."

OPSPEC H121—SPECIAL TERMINAL IFR ROTORCRAFT OPERATIONS IN CLASS G AIRSPACE – SCHEDULED PASSENGER OPERATIONS (OPTIONAL).Standard OpSpec B031, which FAA issued to all air carriers, prohibits IFR operations in Class G airspace unless the FAA issues other OpSpec paragraphs. The FAA issues OpSpec H121 to authorize a foreign air carrier to conduct terminal area rotorcraft IFR operations for scheduled passenger operations in Class G airspace.

- A. Before authorizing OpSpec H121, the POI must determine that the foreign air carrier's Civil Aviation Authority (CAA) has authorized/approved it for these types of operations, and the POI must obtain and list the following information in OpSpec H121:
 - (1) Names of airports.
- (2) Sources of weather information flightcrews must use (see Order 8400.10, volume 3, chapter 7, section 3, and Order 8700.1, volume 2, chapter 76).
 - (3) Source of traffic and airport advisories.
- B. Sources of Traffic and Airport Advisories. Foreign air carriers may be authorized to use any two-way radio source of air traffic advisory information listed in the AIM (for operations in U.S. airspace) or equivalent aeronautical information publications.
- (1) These sources include common traffic advisory frequencies, UNICOM, MULTICOM, and flight service stations.
- (2) If an air traffic advisory source is also suitable for determining the status of airport services and facilities, it is the only source that needs to be listed in OpSpec C080.
- (3) When airport services and facilities information is on a different frequency, both sources should be listed in OpSpec H121.
- (4) In those cases where two sources are listed at the same airport, inspectors must ensure the foreign air carrier' manuals have procedures that require pilots to continuously monitor and use the traffic advisory frequency when operating within 10 nautical miles of the airport. The procedures should require communications about airport services and facilities that pilots must complete while more than 10 nautical miles from the airport.
- (5) At some airports no public use frequencies may be available. In those cases, a foreign air carrier must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who provide

airport status and traffic advisory reports using a company radio must be able to view airspace around the airport.

C. Before issuing OpSpec H121 the foreign air carrier must provide documentation to the POI showing that they have the required methods or procedures and arrangements in place for obtaining and disseminating necessary operational information and they are accepted/approved by their CAA. The FAA may need to issue OpSpec H121 to the foreign air carrier authorized scheduled passenger operations in order to issue OpSpec H122, Special Non 14 CFR Part 97 Instrument Approach or Departure Procedures for Rotorcraft Operations.

OPSPEC H122—SPECIAL NON 14 CFR PART 97 INSTRUMENT APPROACH OR DEPARTURE PROCEDURES FOR ROTORCRAFT OPERATIONS

(OPTIONAL). OpSpec H122 authorizes special non-part 97 instrument approach or departure procedures with rotorcraft. Although the FAA has prepared this OpSpec for future use and the OpSpec is available in OPSS, presently it does not apply to part 129. The U.S. NOTAM system does not cover non-part 97 instrument approach or departure procedures and no system is place for foreign carriers to obtain necessary operational status etc. The FAA plans to include non-part 97 instrument approach or departure procedures in the NOTAM system in the near future. For current information on Special Terminal Instrument Procedures for foreign carriers, contact AFS-50.

OPSPEC H123-199 – RESERVED FOR FUTURE USE.

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